

Comparative Evaluation of the G&D-Rockefeller and Borlaug Women in Science Fellowship Programs

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Acronyms

CGIAR	Consultative Group on International Agricultural Research (CGIAR)
G&D	CGIAR Gender & Diversity Program
FARA	Forum for Agricultural Research in Africa
FAS	USDA Foreign Agricultural Services
NARS	National Agricultural Research System
NARI	National Agricultural Research Institution
USAID	US Agency for International Development
USDA	US Department of Agriculture
WIS	Women in Science



Executive Summary

Two programs – one vision

- The G&D-Rockefeller Fellowship Program to Enhance the Careers of East African Women Crop Scientists, based in Nairobi Kenya.
- The Women in Science Component of the United States Department of Agriculture's (USDA's) Norman E. Borlaug International Agricultural Science and Technology Fellows Program, based in Washington, DC, USA.

Founded on different continents, with different donors and managers, two new fellowship programs with different but overlapping strategies were launched in 2005 to boost the careers of African women in agricultural research. The purpose of the evaluation was to take a closer look at their synergies, the sustainability of the effects the programs have had on the fellows, dissect reasons for success or failure in achieving expected results and propose what best should be done in the future.

Though coming from different origins, the G&D-Rockefeller Program and the Borlaug Program¹ soon recognized their shared visions and joined forces. With additional support, elements of the G&D Program were extended to the Borlaug Fellows. In terms of program design, both include mentoring, leadership training and networking initiatives. The G&D Program provides two-year fellowships and matches fellows with mentors who support them throughout their entire fellowship. The one-year Borlaug Fellowship organizes short-term opportunities for its fellows to collaborate on research projects with a senior scientist in a United States (US) university during which time the scientist offers mentoring support.

Due to the nature of the expected results – changes in the fellows' attitudes, behaviours and skills that could increase their scientific expertise and productivity – a mixed methods approach based on the program theory and extensive stakeholder consultation was selected for the evaluation. The approach included seeking personal opinions and experiences of stakeholders supported by a strong, systematic analysis of such qualitative information.

Fellows, mentors, managers and donors spoke frankly about what was negative and positive in the programs. Qualitative and quantitative methods were used sequentially to triangulate facts and perceptions. Due to the small sample size, extensive qualitative information had to be used to illuminate quantitative data.

The evaluation found that the two “proof of concept” programs are both success stories, although both dealt with challenges in design and execution. They both gave the participating women the skills, exposure and opportunities needed to assess their

¹ For ease of use, the programs will be referred to as the G&D Program and the Borlaug Program, and the program participants will be referred to as G&D Fellows and Borlaug Fellows.

strengths and weaknesses and, in turn, explore how to use these to their advantage both professionally and in enhancing their scientific profiles. The fellowships thus provided avenues for African women to envision crafting their futures as leaders in the scientific arena.

The G&D Program was somewhat more successful than the Borlaug Program primarily due to two design elements and one implementation factor. In terms of the design elements, the G&D Program i) focused on an extended period of mentoring by a senior scientist, often a role model working in a similar environment and adept at encouraging and building those soft skills necessary to navigate organizational dynamics where women are still a minority, and ii) provided support for fellows to attend international science conferences to present their research, boosting their confidence and increasing their visibility. The implementation factor refers to the highly committed G&D management team that worked consistently and responsively to support its fellows as individuals and as a network.

This does not diminish the value of the Borlaug Program's exposure of its fellows to an environment completely different from their own. The Borlaug Fellows were generally younger and more upwardly mobile than G&D Fellows and very few had had opportunities to travel abroad before becoming fellows. The mere fact of the opportunity to be abroad in a highly professional research environment inspired them and their experiences were generally very positive.

The Borlaug Program designers and donors were farsighted in incorporating some G&D elements into their design, particularly the G&D Leadership and Management Course and G&D's networking and information-sharing opportunities which, according to qualitative information, contributed significantly to their results. There are also signs that the Mentoring Orientation Workshop would have yielded good results if all mentors and fellows could have attended.²

In line with its objectives, the Borlaug Program appears to have had somewhat more success in inspiring the participants with respect to hard scientific skills, while the G&D Program emphasized the equally important soft skills without which women scientists are unable to gain profile and lead. Both programs' designers deserve credit for recognizing the need to focus on both of these elements in order to develop well rounded scientists and leaders.

There are some impressive indicators of program success in the fellows' personal assessments of the changes the programs have brought about in their lives as well as in the output data of both programs between 2002-2007.³ Nearly all fellows cited inspiring examples of impacts on their lives that they attributed directly and in convincing detail to their participation in the fellowship programs. These included increased confidence and self-awareness, strengthened networks and improved skills for coping with professional relationships, difficult situations and new (international) contexts. In both rounds, the number of refereed journal articles and mobilized research grants increased significantly.⁴ The design of the G&D Program allowed participants to gain

2 The Mentoring Orientation Workshop was offered to the Borlaug Program's fellows in the first year of the program but, because of logistical and timing problems in bringing mentors and fellows together, it was dropped from the program.

3 Not all contextual factors that may have led to these trends have been studied. However, the timing as well as fellows' own assessments point to the programs as the major, if not the only, contributing factor.

4 The output data should be used with care – numbers are small and other reasons for greater productivity and success were not fully excluded.

more African and international exposure and profile, which increasingly allowed them to lead or participate in international research teams and initiatives.

More could not be expected given the short time that has elapsed and the limited scope of both programs. Such trends need to be monitored over time with elimination of other contextual factors to determine if the positive trends are sustained.

Very few unintended consequences were identified. The only one of real concern was signs of backlash from some colleagues. This situation could have been avoided which highlights the dire need for an additional institutional, systemic focus on the challenges facing African women in science today.

A number of reasons were identified for the relative success of both programs. The holistic designs were based on evidence from earlier G&D experiences and other Borlaug programs. In both programs, the components effectively reinforced and built on one another. One of the key strengths was both programs followed adaptive management approaches, helping them to evolve as lessons were learned. This was done with greater efficiency in the G&D Program which had a monitoring and accountability system that exceeded those of most pilot programs.⁵ Implementation was done well, in particular in the G&D Program whose attentive and efficient management team ensured continuous assessment of progress and individual support when problems were encountered. This type of approach is cost-intensive yet value-adding, complicating any cost-benefit calculation, as the nurturing and supportive approach helped maximize the potential benefits of the program.

Borlaug Fellows' international exposure coupled with leadership training was transformative for many, yet its potential impact was somewhat weakened by the lack of follow-up to build on and expand the fledgling relationships between fellows and mentors. On the other hand, the G&D Program's longer-term and Africa-rooted mentoring component gave its fellows systematic guidance to cope with a range of career constraints and challenges. Qualitative data strongly indicate that this approach has better potential to achieve ripple effects and sustain positive results.

Investing in empowerment and building capacity in a way that is both effective and sensitive to local circumstances is expensive and the results often difficult to measure. Yet both are widely acknowledged to be imperative for the long-term development of the African continent. This needs a strong focus on changes from within and on the scientists also developing soft skills. Both programs are therefore good and timely examples of interventions that give women scientists the skills and opportunities to thrive, even in institutional systems that are not usually enabling.

It is unfortunate that such systems were not targeted for program support. Even limited attention to the policies, strategies and culture in the fellows' organizations would have helped address some of the more serious obstacles women generally face in their work. In spite of the fellows' optimism that the programs will have a sustained effect on their lives, this is not necessarily a given and, in the long run, could seriously affect the short-term results of these interventions. Given the selection process, the participating fellows already worked in fairly supportive organizations, yet backlash from colleagues emerged in a few cases. It remains to be seen what will happen when

5 In the experience of the evaluator.

such programs are implemented in less nurturing institutional environments. Having to fight prejudice and unsupportive policies could wear out the best in the long run.

Many issues and questions emerged during the evaluation that warrant further work. It is important to understand specific nuances and identify the design and implementation elements that specifically contributed to success.

With our current understanding, a potent empowerment initiative based on the best elements of both would be to use the G&D Program design and management structures and add an international research exposure component similar to that in the Borlaug program. Coupling this with a well designed institutional support component would go a long way towards empowering a critical mass of African women scientists with the confidence and capacities to effect real change within the systems in which they work.

Introduction



Societal beliefs, attitudes and behaviours lead to differential perceptions of, and expectations for women as compared to men. Addressing the root and underlying causes of this situation requires long-term investment in systemic change in order to create measurable shifts in attitudes and behaviours toward women as well as structural changes in complex, interconnected organizations, professions and practices.⁶ As part of this investment, program interventions can have great value and, in turn, evaluations of such programs can provide better understanding what should be done to ensure that programs are well designed and implemented, that they yield positive results in the short and long term, and that they inform future initiatives and scaling-up efforts.

This paper presents the results of an evaluation undertaken in order to take a closer look at two new fellowship programs aimed at boosting the careers of African women in agricultural research. The evaluation considered the programs' different but overlapping strategies, their synergies and the sustainability of the programs' effects on the fellows. It also dissects reasons for success or failure in achieving expected results and proposes what best should be done in the future.

G&D-Rockefeller Fellowship Program

The Rockefeller Foundation in 2005, joined by the Syngenta Foundation for Sustainable Agriculture in 2006, funded the CGIAR Gender & Diversity Program (G&D) to design and implement a pilot fellowship program to enhance the careers of women crop scientists in East Africa, in particular in Kenya, Tanzania and Uganda. Known as the G&D-Rockefeller Fellowship Program, it offered two-year fellowships primarily for women from National Agricultural Research Institutions (NARS). As a core concept, it organized formal mentoring by a senior scientist for each fellow throughout her fellowship as well as leadership and negotiations training and access to electronic networking with women scientists around the world. Provision was also made for each fellow to attend two international conferences and to mentor a junior woman scientist (junior mentee) during the second year of her fellowship.

Borlaug Fellowship Program

The Norman E Borlaug International Agricultural Science and Technology Fellows' Program launched a Women in Science (WIS) component in 2005. This program also was based on a form of mentorship, but its approach emphasized short-term scientific training and research collaboration. Young women scientists working in agriculture in West African institutions were supported to spend four to six weeks at highly regarded

⁶ Carol B Muller, MentorNet (2002). *The under-representation of women in engineering and related sciences: pursuing two complementary paths to parity*. Retrieved on 1 October 2007 from www.Mentornet.net.

US universities to initiate collaborative research on a topic of mutual interest with successful senior scientists who served as their short-term mentors. They also participated in the G&D Women's Leadership and Management Courses, the G&D electronic networking initiatives and, in the case of the first round of fellows, the G&D Mentoring Workshop. These offerings were not included in other Borlaug Fellowship Programs while follow-up visits to the fellows' home countries which are part of the standard Borlaug Fellowship, were not part of the WIS Program. The Borlaug Women in Science Fellowship Program is funded by the US Agency for International Development (USAID) and managed by the US Department of Agriculture (USDA).

In 2007, USAID, through G&D, made resources available to conduct this evaluation. The synergies and overlap of the programs with their somewhat different strategies provided a good opportunity for a comparative evaluation that could determine the strengths and weaknesses of each and highlight the most important lessons.⁷

⁷ The Terms of Reference of the evaluation are given in Annex 1, and a summary of the key elements of each program in Annex 2.

Evaluation Design



Purpose of the evaluation

The funding and management agencies – USAID, USDA, Rockefeller Foundation, Syngenta Foundation and G&D – were interested in identifying:⁸

- strengths and weaknesses of the two types of fellowships,
- value of the various elements of the fellowships in fostering improved scientific research and developing agricultural leaders,
- impacts at various levels of the two programs, and
- pathways through which these types of programs could potentially contribute to increased agricultural productivity in Africa.

For this purpose, it was necessary to understand:

- which elements work best,
- which do not work and why,
- the relative return on investment.

The approach

The evaluation approach was determined by the purpose of the evaluation as defined in the Terms of Reference,⁹ the evaluation questions that had to be answered, the nature of the program, i.e. its focus on individual empowerment, and the resources available.

The evaluation had to determine from the two overlapping yet differing programs what works and what does not when women scientists in Africa are provided with support and opportunities to advance their careers and increase their skills and visibility in their chosen fields. This included looking at: how best to direct investments to uncover and enhance the fellows' scientific leadership and technical capacities for sustained results, what could be improved in the next phases and what could be learned that can inform future, possibly larger scale activities.¹⁰

The evaluation therefore sought to:

- assess the effectiveness of the two programs in achieving expected (or unexpected) results given the underlying program logic,
- understand the reason why (or why not) these results were achieved, and
- determine lessons for the future.

Identifying key factors responsible for success or failure meant focusing on the designs, implementation processes and perceived results, particularly output trends and outcome-level changes in behaviour, attitude, skills and situation.

⁸ Extracted from the Terms of Reference

⁹ As described in the Terms of Reference which can be found in Annex 1.

¹⁰ Note: this was not geared to be a fully-fledged evaluation aimed to inform scaling-up or transferability initiatives. The lessons learned in this respect are thus not comprehensive.

Given that both programs were implemented as “proof of concept” interventions, the evaluation was forward-looking. It focused not only on assessment of past performance but also on those aspects that could be improved in future phases and that might yield the biggest challenge if the programs are scaled up.

Due to the focus on the empowerment of individuals and on short-term results (given the timing of the evaluation), a constructivist approach was used that valued the insights and perspectives of stakeholders – the fellows, their colleagues, mentors and, in the G&D Program, the junior mentees.¹¹ The program design, implementation processes and management systems were analyzed to identify the main reasons for success or failure.

The evaluation did not speculate about what would have happened in the absence of the interventions and instead focused on understanding “what, for whom, how, why and under what circumstances” change came about. The simple underlying program theory guided the evaluation in each case, yet space was allowed for alternative explanations for results to emerge.

Methodology details

The approach and methodology were in large part determined by the time and funding available.¹² An evaluation matrix was developed to bring focus and systemize the set of guiding questions and sources of data. The primary unit of analysis was the individual – each fellow’s experiences and response to each program component and to the program as a whole.

The G&D Program had gathered good monitoring data but neither program had gathered adequate baseline data in terms of profiles and perspectives at the time when applicants were selected for participation. The evaluation used a mixed-methods approach to enable triangulation of information from different sources and methods (as well as the evaluator’s expertise) to help ensure credible evidence and detect biases or manipulation of facts or perceptions.

The methods included a document review, one-on-one interviews, surveys and an assessment of fellows’ research related outputs as well as “impact stories”.¹³ A sequential approach and subsequent data integration drawing from each method were used to arrive at findings. This meant that the desk study and preliminary interview data from the two programs were followed by surveys and further clarifying interviews with additional document review as required.

Data collection

General

Data came from a variety of sources using a variety of methods, including participants’ own viewpoints and description of their experiences. Since the evaluated programs were aimed at individual empowerment where tangible results might appear only over time, an analysis of participants’ own perceptions was seen as an important part of the

11 Applying a positivist approach using a control group was found to be neither realistic nor desirable. A realist evaluation approach would have been appropriate, but resources were too limited.

12 The evaluation had to be conducted in rapid-review format by one evaluator contracted for a period of 35 days

13 “Impact stories” consist of the articulation by the intended beneficiaries of the positive and negative effects that an intervention has had on them. They serve as a means of monitoring and assessing progress and effectiveness.

evidence. Participants in the surveys and interviews could not benefit from any continuation of the programs so were keen to explore both negative and positive aspects for the benefit of those who might come after them. In a number of cases, consistent qualitative data from interviews were essential to explain the quantitative results. In a few instances, the consistency of the qualitative information clarified what appeared to be contradictory quantitative results.¹⁴

Document review

The evaluation was initiated with a document review (Annex 3) that concentrated on materials assembled by the evaluation's key contact persons from both programs. The documents provided important historical and contextual information including initial funding proposals, progress reports, workshop reports, presentations prepared for various meetings and "impact story" reports for the period under review. The desk review information helped to direct the development of the survey and interview instruments.

Interviews

In-depth, one-on-one semi-structured telephonic interviews were conducted with 59 key informants including the fellows and mentors from both programs as well as the program donors, coordinators and administrators (Annex 4 and 5). In some instances, colleagues and supervisors of the fellows were contacted in order to confirm fellows' accounts of the changes that resulted from the program. Fellows were randomly selected, after which a few adjustments were made for institutional and geographic representation. As far as availability would allow, the selected mentors of the selected fellows were interviewed for mutual verification of perspectives and experiences.¹⁵ Approximately 50 percent of the fellows and mentors and 100 percent of the program administrators were targeted for interview in order to allow for data collection to be completed within the allocated time frame. Interviews were conducted in English;¹⁶ all concerned were comfortable in doing so.

Time constraints made it impossible to reach and consult systematically with a significant number of the fellows' colleagues and superiors for corroboration of the fellows' own assessments. Only 13 colleagues of ten G&D Fellows and five Borlaug Fellows could be contacted (some overlapped).¹⁷ The evaluation would have benefited significantly from a larger number of colleagues' contributions, although the consistency with which colleagues' inputs agreed with those of the fellows was at least indicative of the reliability of the information. There also was not enough emphasis on interviewing the managers and supervisors of the institutions in which the fellows worked. The interviews were conducted using an interview guide.

The interviews with program stakeholders were conducted in semi-structured conversational style, using an interview guide and lasting 1.0 - 1.5 hours. The purpose was to:

- increase understanding of the programs' theories;
- gain an understanding of participants' experiences in the programs and of each component;

14 For example, qualitative information indicated that a slightly more positive perception of the Borlaug Program on a number of aspects was partly due to fact that the Borlaug Fellows were somewhat less experienced and more junior than the G&D Fellows, and partly due to the extraordinarily inspiring nature of exposure to the advanced scientific environment in the participating US institutions.

15 This was achieved in all but four cases

16 One interview was conducted in both French and English as the interviewee was more comfortable speaking in French.

17 Their names are not provided in the relevant annex for reasons of confidentiality

- explore participants' perceptions of the extent to which the intended results were attained;
- solicit suggestions for improving the programs, or similar interventions, in the future.

All interviews with program participants were conducted by the evaluator and detailed interview notes were recorded for use in the analysis. Interviews with colleagues and supervisors were conducted by another person contracted only for this purpose. The interview data was thematically analysed and used together with the data from other evaluation methods to arrive at the findings.

INTERVIEWEE CATEGORY	TOTAL POSSIBLE NUMBER		NUMBER INTERVIEWED		%	
	Rockefeller	Borlaug	Rockefeller	Borlaug	Rockefeller	Borlaug
Fellows	22	19	10	11	45%	56%
Mentors	20	18	11	9	55%	50%
Donors, Managers, Coordinators and Steering Committee Members	9	11	8	10	88%	91%

NOTE: The 10 Fellows from the 4th Borlaug Round were not included in the sampling frame because they had not yet progressed far enough with the program at the time at which this evaluation was done. Only rounds 1 to 3 of the Borlaug Program and Round 1 and 2 of the G&D Rockefeller Program were targeted.

Surveys

Three survey instruments¹⁸ were created after the initial document review and some of the qualitative interviews were conducted:

- Fellows Survey – administered to fellows from both programs with two slightly different versions designed to ensure that all the questions were relevant to the fellows of both programs;
- Junior Mentee Survey – administered to junior mentees (G&D Program);
- Mentors survey – administered to mentors from both programs.

The purpose of the surveys was to obtain quantitative data from the two programs that could be compared easily and would allow assessment of the differential successes of the two programs. They consisted of both open- and close-ended questions.¹⁹ Telephonic and email follow-up was done after a week and maintained until nearly all the targeted participants were reached in person.

Despite multiple follow-up attempts, response rates for the Mentor Survey and the G&D Fellows Survey remained low. Not all respondents answered all questions. The table below indicates the response rates.

¹⁸ The three survey instruments can be seen in their entirety in Annex 5.

¹⁹ The surveys were administered anonymously via SurveyMonkey, an online hosting platform. All relevant mentors, fellows and junior mentees were invited to complete the survey. Prior to their administration, the surveys were pilot tested by program staff familiar with the programs. The Web interface also was tested from a dial-up connection. Participants who did not have reliable Web access had the opportunity to complete an MS Word copy of the questionnaire. While this would impinge to some degree on the anonymity condition of the survey, the evaluator had no access to the persons' information. An individualized email letter was sent to each participant.

Respondent Category	Total Number	Responded		Completed questionnaire		Follow-up not successful	Declined to participate
		Nr	%	Nr	%		
Fellows: G&D Round 1 & 2	22	12	54.5%	8	36.4%	7	1
Fellows: Borlaug Round 1-3	19	16	84.2%	12	63.2%	6	1
Fellows Total	41	28	68.3%	20	48.8%	13	2
Junior Mentees	21	16	76.2%	14	66.7%	2	2
Mentors	41	15	36.5%	14	34.0%		

Since the response rates were relatively low and the self-selecting nature of the sample could not guarantee the exclusion of any systematic bias, the quantitative findings were treated with care. They were primarily used to confirm qualitative data or, where discrepancies were found, to probe more using other methods in order to understand the reasons. Given the very low response rate of mentors, their findings were not reported and were not used. The consistency during triangulation of the data from the Fellow Survey and Junior Mentee Survey with the extensive qualitative data for each of these rounds indicated reliability, in spite of the fact that all those targeted did not respond.

Analysis of output data

Many of the most important results of programs such as these are intangible and depend on observations by the intended beneficiaries and their colleagues and friends. But tangible results were also expected, in particular an increase in the variety and quantity of outputs linked to the scientific, leadership and management skills of the fellows. A detailed template for the expected results was developed and sent by email to the fellows. The response rates were 77 percent for the G&D Fellows and 79 percent for the Borlaug Fellows.

The output trends can be regarded only as an *indication* of the effects of the programs on the fellows. Their interpretation should be handled with care as the numbers are small and other factors in the external environment also could have contributed to such changes. Triangulation was done with the interview data to enhance reliability. The graphs found in Annex 7 provide information per group, although the analysis focused primarily on the total group in each program as a whole.

Impact stories²⁰

Impact story reports that had been collected from fellows and junior mentees by the G&D management team were mapped to an impact template and updated by participants. The response rate was 77 percent for the G&D Fellows and 79 percent for the Borlaug Fellows (Annex 8).

Where the sequencing allowed, the impact stories were discussed during the interviews to determine whether the impacts resulted from the programs or if there were

²⁰ Refer to footnote 13 for a definition of 'impact stories'. For obvious reasons the stories were at 'outcome' (changes in behaviour, attitudes, skills, situation) rather than at 'impact' (societal change) level.

other factors involved. The passion with which the fellows and their mentors spoke about the changes and the reasons for them served as a strong indicator of the reliability of the information, especially since the fellows could gain nothing by attributing such stories incorrectly to the program. Both these data sets were consolidated in the template to inform the interviews that were conducted with the fellows' colleagues and supervisors.

Data analysis

In the analysis phase, the survey data was cleaned and subjected to quantitative analysis techniques. This resulted in descriptive statistics and some inferential statistics where group ratings were compared.

The qualitative information was analyzed in a manner that combined inductive and deductive approaches. This allowed patterns to emerge while, at the same time, working according to pre-determined categories inferred from the evaluation questions, with all captured in a template that was used throughout.

The data from the qualitative and quantitative methods were used for triangulation and fully integrated in order to arrive at the findings.

The credibility of the evaluation

Quality standards

The technical and ethical standard for the evaluation was guided by the African Evaluation Guidelines²¹ which are based upon the internationally recognized Program Evaluation Standards²² and serve as a guide for professional evaluators working in Africa. As far as possible, accepted practice standards were followed for each of the methods during data collection and analysis. The Qualitative Evaluation Checklist²³ by Michael Quinn Patton served as guide for the qualitative aspects of the work to the extent that it could be applied.

Ethical considerations

The evaluation was independent to the extent that neither the evaluator nor those assisting her knew any of the program managers or their staff or had any advance contact with the programs. The evaluation was commissioned by the G&D Program Leader in conjunction with the donors. At no time was any pressure exerted by anyone to direct or influence the evaluation approach or any findings and conclusions. The evaluator was an African scientist and evaluator by profession who understood the context well yet was at all times aware of the need not to let preconceived notions affect the work.

Confidentiality of the respondents and informants was safeguarded at all times. No one except the evaluator and those assisting her had any insight into interview or survey comments. The anonymity of the survey information was somewhat affected by the need to accept emailed questionnaires, but it is unlikely to have had an effect on the response rate or credibility of the information.

21 Refer to <http://www.afrea.org/content/index.cfm?navID=5&itemID=204>

22 Refer to <http://www.wmich.edu/evalctr/jc/>

23 Refer to <http://www.wmich.edu/evalctr/checklists/qec/>

Constraints

Key constraints affecting the technical quality of the evaluation were the following:

- limited resources, which meant the evaluation had to be conducted in a “rapid review” style, thus limiting the opportunities for: more extensive contextual analysis of changes in the environment that might have affected the program results, comprehensive testing of the program theory of change and data collection from those outside the program environment;
- relatively limited opportunity for triangulating information and opinions of stakeholders with those outside the program, including key managers as well as colleagues and friends of the fellows and junior mentees,²⁴
- small sample sizes which gave the qualitative information and rigorous triangulation particular importance,
- relatively low response rates for the surveys which had to be compensated for by the extensive qualitative interviews with mentors, managers, administrators and fellows, as well as the output data and impact information.

In spite of these constraints, the rich qualitative information as well as triangulation among several data and information sources and methods strengthened evidence of change and the factors that have contributed to these changes.

²⁴ This is unlikely to affect the findings of the impact on the program participants, but would have elucidated other important aspects including the chance for sustainable results affecting the institutions and the larger National Agricultural Research Systems (NARS) in the relevant countries.



Main Findings

3

The program design

Relevance and timeliness

Were the two programs relevant and timely interventions?

Both programs were timely and relevant to current challenges, needs and priorities. They were designed to take on one of the most urgent challenges in Africa – understanding how to empower and transform enough individuals (and institutional and societal systems) so that development can be driven by Africans. Many people believe that only when the intellectual resources on the continent are allowed to flourish and lead will there be a strong backbone for development, rooted in African value systems yet in tune with the world.

Given the lack of capacities in Africa, women leaders are needed everywhere, but even more so in the agricultural sector with its predominantly female labour force. Yet in view of the systemic constraints that African women face every day, designing interventions that make a real, sustainable difference remains a major challenge. Therefore, pilot programs that test hypotheses have the potential to provide urgently needed and valuable lessons.

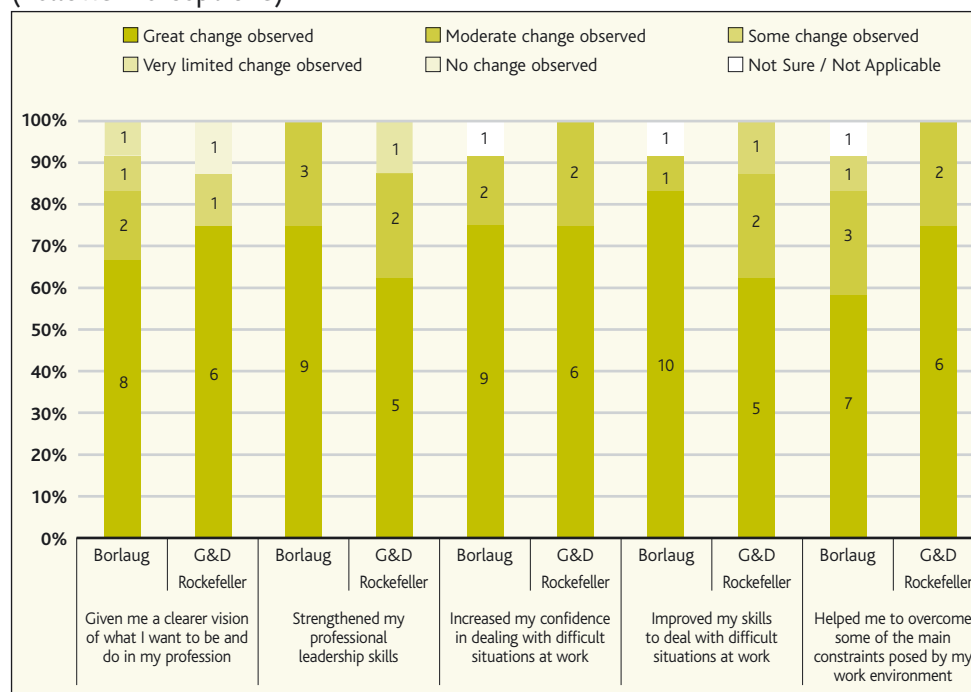
Drivers for the program design

Both programs are novel yet informed by past experience, thus somewhat decreasing the risk of failure. This was more so in case of the G&D Program, given its successful CGIAR women's leadership programs that have evolved over the last decade based on leadership research and G&D's own experience. While the relatively new USAID Borlaug Fellows Program served as the model for its WIS initiative, the Borlaug designers also adopted proven elements of the G&D experiences (in particular the G&D Women's Leadership and Management Course and the G&D information networks) to increase the leadership focus of the program.

The programs are based on a specific notion of leadership in science that argues for much more than scientific prowess. They not only balance the softer elements related to people, relationships and communication with the harder scientific expertise, they also offer opportunities to expand the women's professional and social networks. In both cases, these holistic designs provide a potent mix where each component reinforces the other and plays a meaningful role in the empowerment process. The G&D Program was initially better structured in this regard, but the Borlaug Program designers were far-sighted enough to include proven G&D elements in spite of the increased cost. Qualitative data show that it added significant value to their program results, and survey results indicate that the various leadership aspects

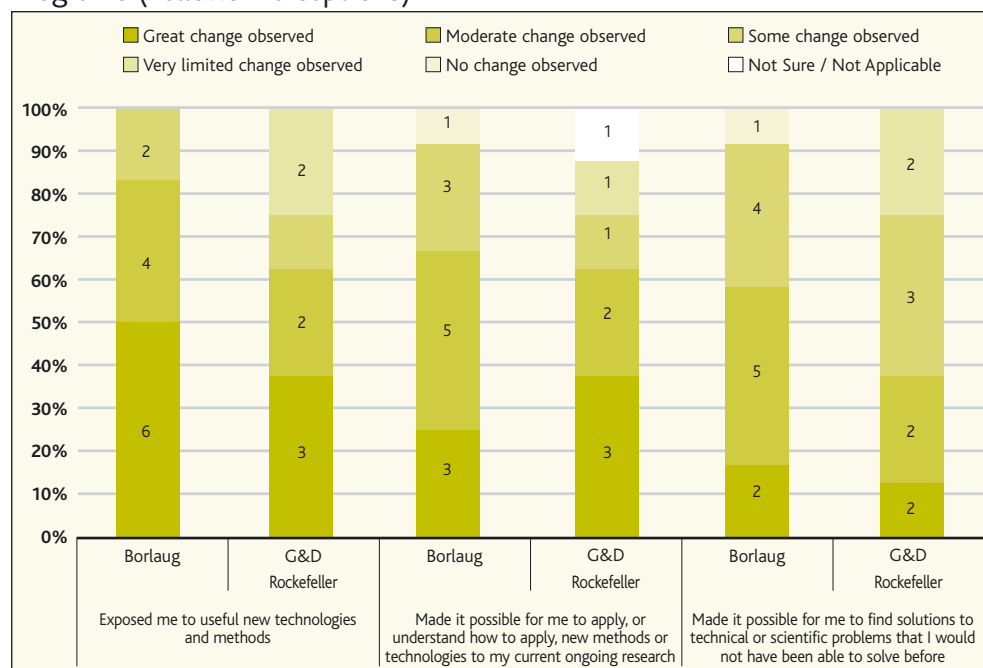
were recognized by participants from both programs, particularly the degree to which the programs increased the participants' confidence in dealing with difficult work situations (Figure 1).

FIGURE 1 Perceptions Regarding Selected Leadership Aspects of the Programs (Fellows' Perceptions)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 2 Perceptions Regarding Technical & Technological Aspects of the Programs (Fellows' Perceptions)*

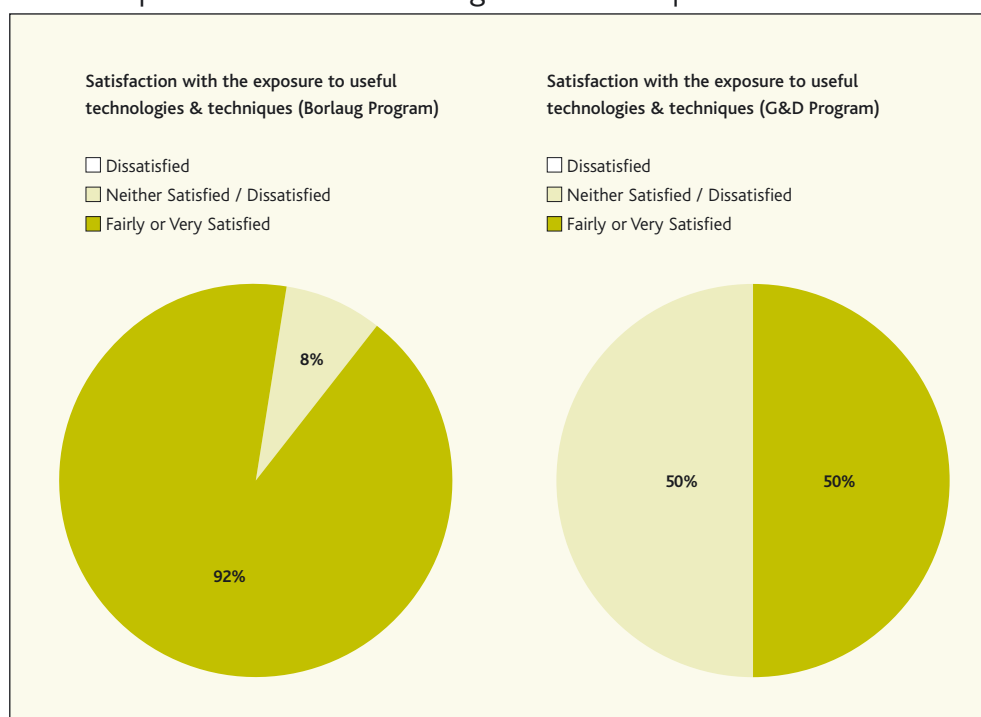


*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

A key difference is that the Borlaug Program was designed to have a more explicit focus on the fast transfer of hard science skills during the very short mentoring period.

- Figure 2 shows that approximately 83 percent of Borlaug survey participants indicated that a moderate or great change occurred in the degree to which they were exposed to useful new technologies, 66 percent said that they learned to apply new methods or technologies, and 58 percent said they found solutions to technical problems that they would not have been able to solve on their own. In each case, the percentage of Borlaug survey participants that affirmed this was higher than the number of G&D survey participants.
- Consequently Borlaug participants were more satisfied with the exposure to useful technologies and techniques. Of Borlaug Fellows, 92 percent were very or fairly satisfied with their exposure to useful technologies and techniques during their mentoring period compared to 50 percent of G&D Fellows (Figure 3).
- The Borlaug participants were generally more positive about the benefits of the program for their scientific expertise despite the fact that a number were not well matched scientifically with their mentors. This is likely to be partly because they were geared from the beginning to expect this as the most important part of their exposure, while the G&D mentorship included a much stronger focus on leadership, research management, authorship and other soft skills.
- The qualitative evidence confirms that the inclusion of the G&D's soft skills components in the Borlaug Program added significant value to the desired changes and were very much appreciated by the Borlaug Fellows. At the same time, a significant number of G&D Fellows wished for more exposure to the laboratories and scientific work of their mentors or other experts. Both groups were of the opinion that their program was better at enhancing their leadership than their scientific skills (compare Figure 1 and Figure 2).

FIGURE 3 Exposure to Useful Technologies and Techniques*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

Coherence and comprehensiveness of the program design

Did the program designs provide credible logic and convincing bases for action? Are there indications that any component may not be useful given the program goals?

The G&D Program logic indicating how change was to happen was very well articulated.²⁵ The well implemented program provided a good opportunity to test this theory. A key strength of the design was that the different components continuously reinforced one another. The defined goals and expected results gave clear direction to implementation. In line with the experimental nature of the program, its intensive monitoring system brought rich lessons to the fore.

The Borlaug Program was less well presented. Its goals reflected actions rather than aspirations, with desired results not clearly defined and provision not made for a systematic monitoring system for learning and accountability. The program articulation within the overall Borlaug Program framework, the need for quick implementation and the nature of the relationship between USDA and USAID led to some ambiguities and differences over what the program was to achieve. A lack of institutional memory due to management staff turnover also complicated matters. On the other hand, it gave those involved the flexibility to adjust the program design. In the end, implementation and results hardly suffered, in part due to the commitment of the fellows, the mentors and university offices responsible for delivery, and in part due to improvements made by the program management and designers as lessons were learned.

Figure 4 and Figure 5 give the fellows' perceptions of the value of each program component. All G&D Fellows (100 percent) viewed the opportunities to attend international conferences of great value; 75 percent of fellows from both programs rated the publications and online resources as of great value; and 100 percent of G&D Fellows and 83 percent of Borlaug Fellows rated the contact with other fellows as of great value. The quantitative results were further supported by the qualitative information, indicating that the fellows found that all the components were mutually reinforcing and contributed to the changes they observed.

Design for sustainable positive results and action

Were the designs done in a manner that increases the chance that positive results would be sustained?

The fundamental premise for both programs is that for women scientists to reach their full potential, they need to be empowered – to believe in themselves; to understand their professional environment, relationships and organizational dynamics; and to gain the skills and knowledge to cope with challenges and adversity as well as to advance in their scientific expertise. New networks, greater exposure and increased opportunities help reinforce and sustain their newly gained power and profile. This, in itself, provides for true individual transformation and support that can help individual women cope with and overcome adversity in the long term.²⁶

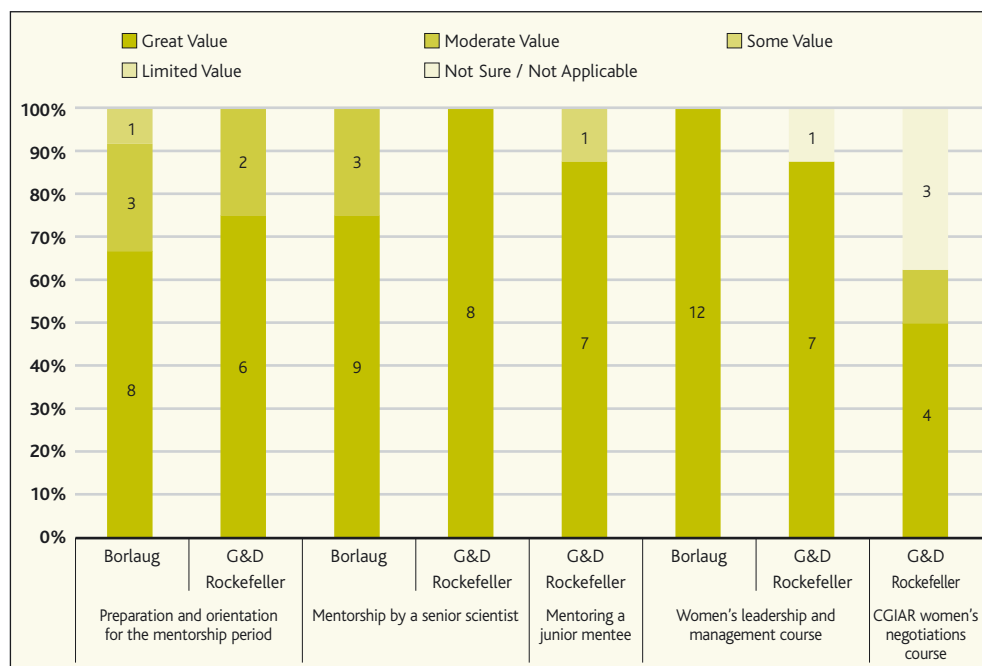
Yet, leadership is not just about competencies and traits, or even just about immediate relationships. Leaders are located in systems of authority and occupy social positions in organizations. Science in Africa is currently dominated by men. Thus, it is a great pity that neither program's funding allowed for attention to the organizational systems

²⁵ 'Theory of change'

²⁶ Refer to Annex 3; supported by qualitative information.

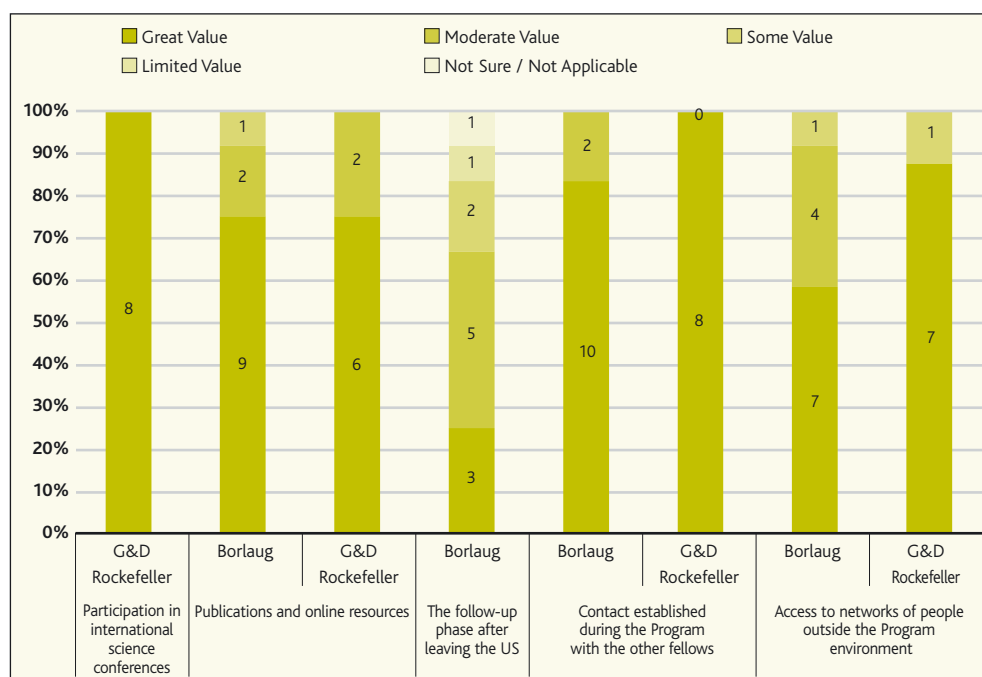
in which women scientists work. The survey results (Figure 6) showed that only about 13 percent of the G&D survey respondents and 33 percent of the Borlaug survey respondents strongly agreed that the program in any way addressed the institutions in which the fellows worked. Qualitative information confirmed that those with a positive assessment based it on their perceptions that institutions, through the fellowship programs, have better trained and exposed staff members, and not that the program was effective at addressing institutional issues that could lead to larger scale sustainable change.

FIGURE 4 Rating of Program Components (1)(Fellows' Perceptions)*



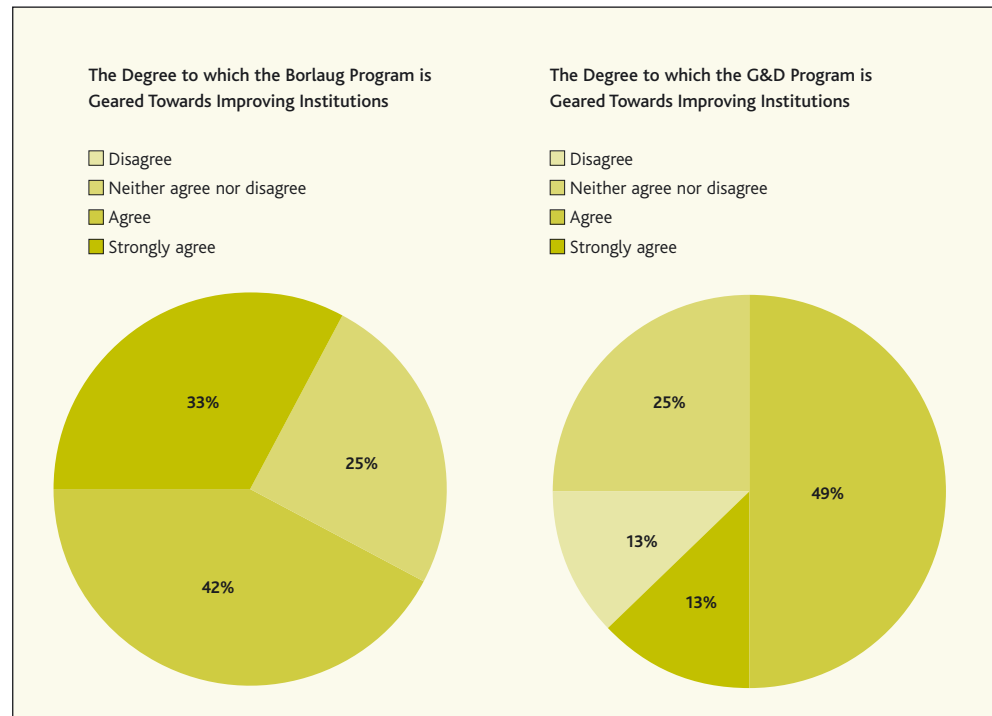
*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 5 Rating of Program Components (2)(Fellows' Perceptions)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 6 The Degree to which Programs are Geared Towards Improving Institutions*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

Addressing the “immediate” causes for the disempowerment of women is an excellent start, yet without addressing some of the key “underlying” or “root” causes with vigour,²⁷ it is much more uncertain that benefits will be sustained over time. In spite of the fact that the selected fellows already came from more sympathetic work environments (it was one of the criteria for selection), the need for attention to the organizational systems and the needs of male colleagues in order to avoid a push-back from them was a constant theme emerging in nearly all conversations. The importance of attention to the work environment was reinforced by an analysis of the fellows’ views on leadership and their perceptions of barriers to better performance. There were already several indications of push-back from male colleagues in power including, at least, two quite overt cases.

Fellows themselves indicated that these pilot programs were designed in a manner that provided relevant support and were likely to yield positive sustainable results in terms of leadership and technical ability for them individually and for their institutions.

- More than two thirds of the survey respondents said that the program design was well aligned towards making a real difference in the scientific and leadership skills required by African scientists such as themselves. More than 90 percent of the survey respondents said that they did apply what they learned (See Figure 7).
- Although more of the Borlaug survey respondents were enthusiastic about the degree to which the programs were geared to benefit their institutions, the num-

27 *Immediate causes* include women’s own capacities, behaviours, attitudes and responses to adversity; organizational policies; family structure and commitments. Focus for change is largely on the individual, organizational policies and family support.

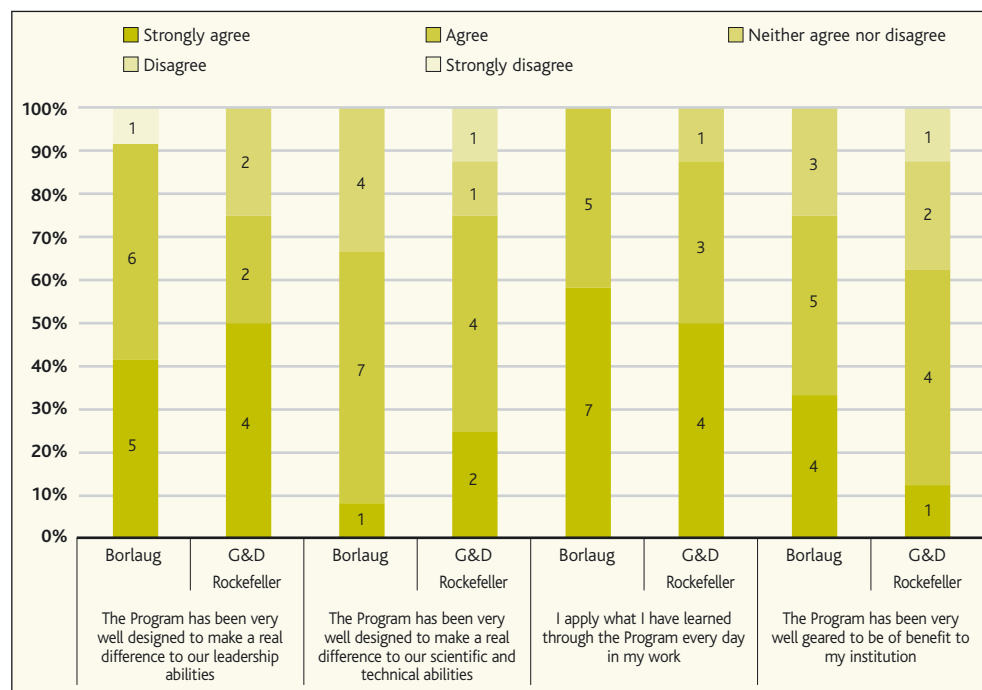
Underlying causes include organizational and social beliefs, attitudes, behaviours, values and situations that lead to differential perceptions of, and expectations for, women, predisposing an organization, family or community not to allow women to take their rightful places. This leads to traditional gender roles, social exclusion and feelings of inferiority. Focus for change is on deeply rooted individual attitudes, gender groups, organizations and certain organizational/societal systems.

Root causes include the larger economy and society influencing the environment in which women either can flourish or be suppressed. They are likely related to the pursuit of power, security and societal dominance of one group over another.

ber of respondents who chose not to express any opinion on this matter suggests that institutional support has not been directly considered a design aspect.

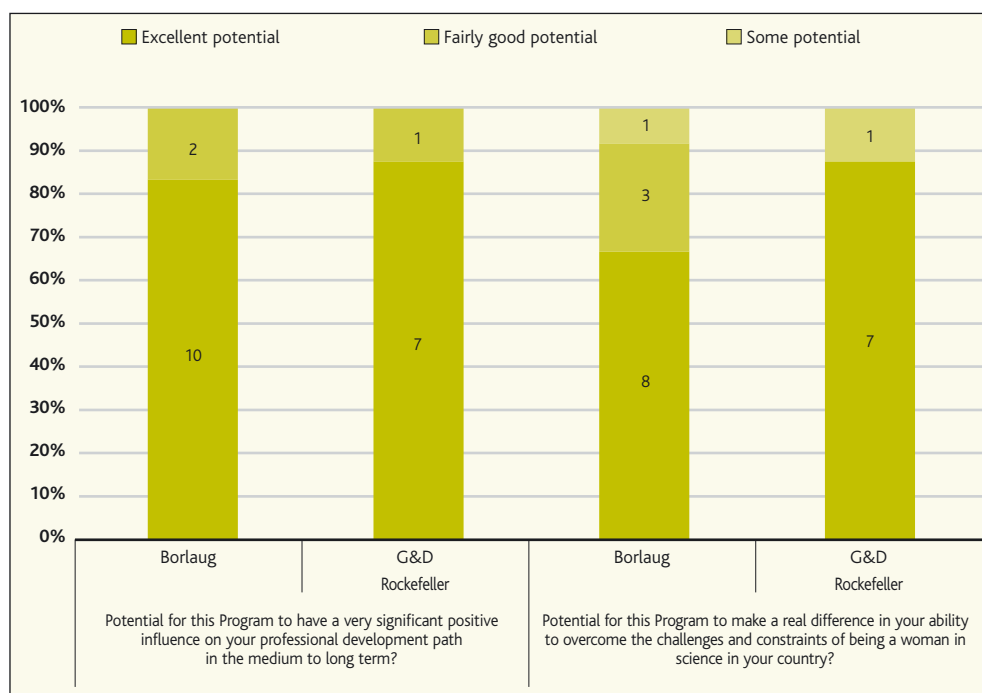
- All of the survey participants from both programs (100 percent) felt that the programs had “excellent” or “fairly good” potential to deliver benefits in terms of career path. All but one of the survey participants felt that the program equipped them to overcome cultural challenges and constraints (see Figure 8).

FIGURE 7 Perceived Effectiveness of the Programs (Fellows’ Perceptions)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 8 Perceived Sustainability of the Program Results (Fellows’ Perceptions)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

Frequencies for each response category (e.g. agree, disagree) are indicated as value labels on the graph, and the intersection with the scale on the Y axis denotes the % out of the total number of respondents within each program.

Even though it is too early for a convincing assessment of the potential for sustainable results of these young programs, at this stage the G&D Program design seems to have significantly more potential in this respect. Both programs are about changes in attitudes, behaviours, knowledge, skills, relationships, profile and performance that are likely to have a ripple effect among those at work and at home. Yet, qualitative information strongly indicates that the longer G&D mentorship period has a better chance of instilling real change over time, as it gives fellows a better opportunity to work through different types of career challenges with the guidance of a mentor. Qualitative information shows that this provides them with more experience and resilience for facing institutional and social challenges and barriers. This advantage is unlikely to be offset in the long run by the short exposure to advanced foreign laboratories – the primary advantage of the Borlaug Program.

Although this assessment appears to be contradicted by some of the quantitative data, in Figures 9-10 and 12-13,²⁸ interviews showed that the Borlaug Fellows' more apparent optimism stemmed from their i) somewhat less experience, qualifications and seniority in the system (Annex 6); ii) strong views that the exposure to a foreign environment was "life-changing"; and iii) their own commitment to ensuring that benefits will continue in spite of the lack of in-built aspects promoting sustainability.

Follow-up after the mentoring period is part of other Borlaug programs, but the funding was diverted from the follow-up to allow the Borlaug WIS fellows to participate in G&D's leadership and management courses and to enable more fellows to participate in the program. The benefit of participation in the G&D courses is beyond doubt. Yet, all Borlaug Fellows and Borlaug Mentors interviewed viewed the lack of a follow-up strategy as a significant weakness that is likely to affect the sustainability of positive gains in the long run, in spite of their commitment (in most cases) not to let it happen. This is confirmed by the fact that only 8 percent of Borlaug Fellows are in contact with their (past) mentor at least once per month, compared to 62 percent of G&D Fellows (Figure 11).²⁹ The seminars held upon the return of a number of the Borlaug Fellows benefited their institutions and, in some cases, encouraged others to apply for fellowships – thus adding to the ripple effect.

Qualitative information (confirmed by fellows' opinions) shows that there are three main reasons why positive benefits were likely to be sustained over time: i) personal changes in their understanding and attitude towards themselves and those around them and the skills gained to cope with challenging situations (very strong in both programs); ii) the contacts and networks they have established that can advance their careers (very strong in both programs); and iii) the profile they have gained (more pronounced in the G&D Program due to the opportunities for international networking).

The capacity to establish and coordinate women-in-science programs should be embedded in Africa. The G&D strategy to select an African coordinator as well as steering committee members who were WIS role models from Africa was an excellent innovation to ensure that additional key capacities remain in Africa.

Similarly, mentoring skills should be embedded in African institutions so that those taught can become teachers. Here, the G&D strategy to use mentors from Africa and to institute a system of junior mentees so fellows can practice their mentoring skills

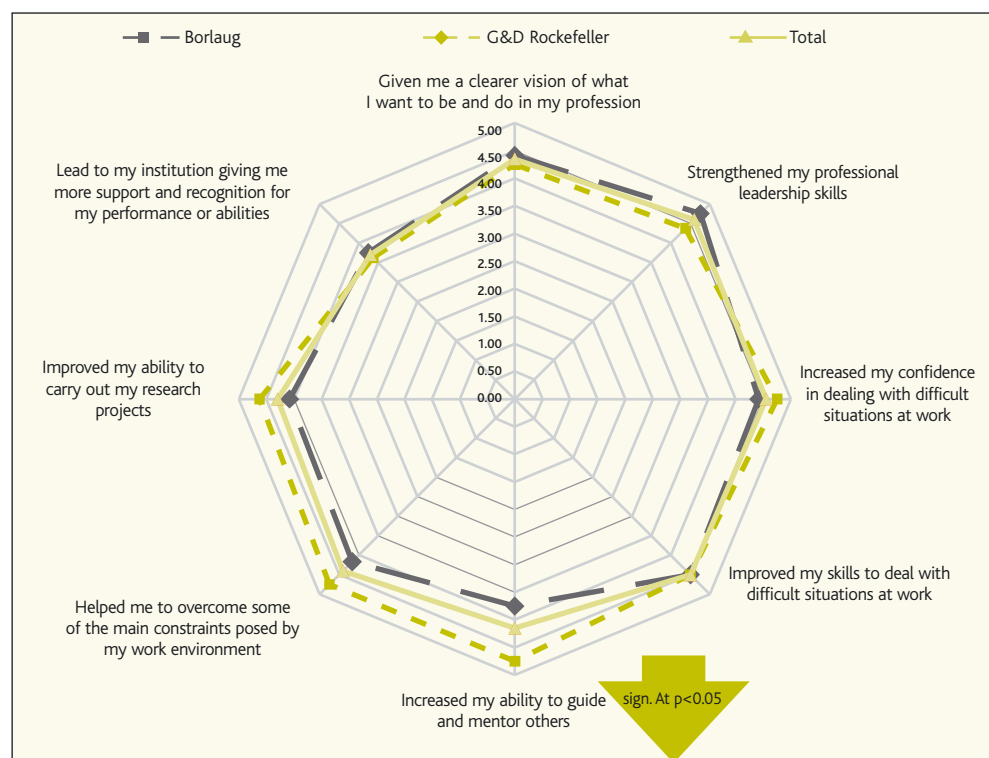
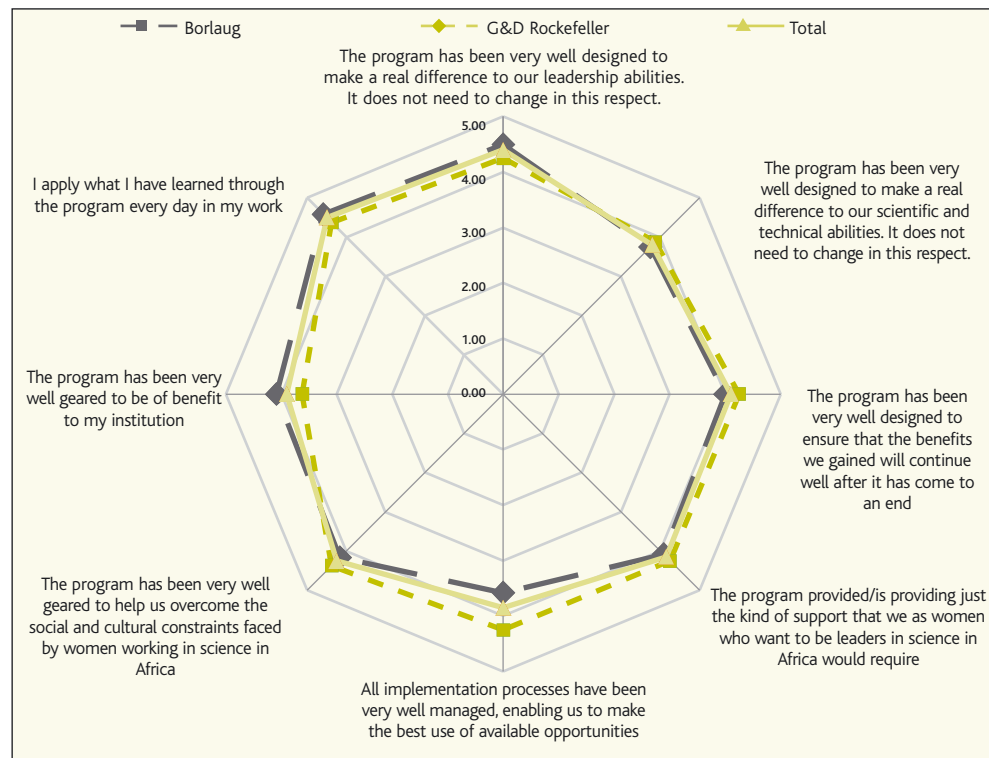
28 Refer for example to the positive perceptions among participants from both programs in Figures 12 and 13. Figures 9 and 10 show that there were very few statistically significant differences in the average ratings of fellows from the two different programs. Where they were different, there was no consistency in which program was rated more positively.

29 Note: a number of the latter are still engaged in the active mentoring period.

is yielding further spin-off benefits. This does not at all diminish the value of the Borlaug Program strategy or the contributions of the US-based mentors who were very valuable in exposing fellows to inspirational foreign environments, in this case US-based universities. But, the Borlaug program has received additional benefits from its investments in those components linked to the G&D Program design.

FIGURE 9 Comparison of Program Ratings*

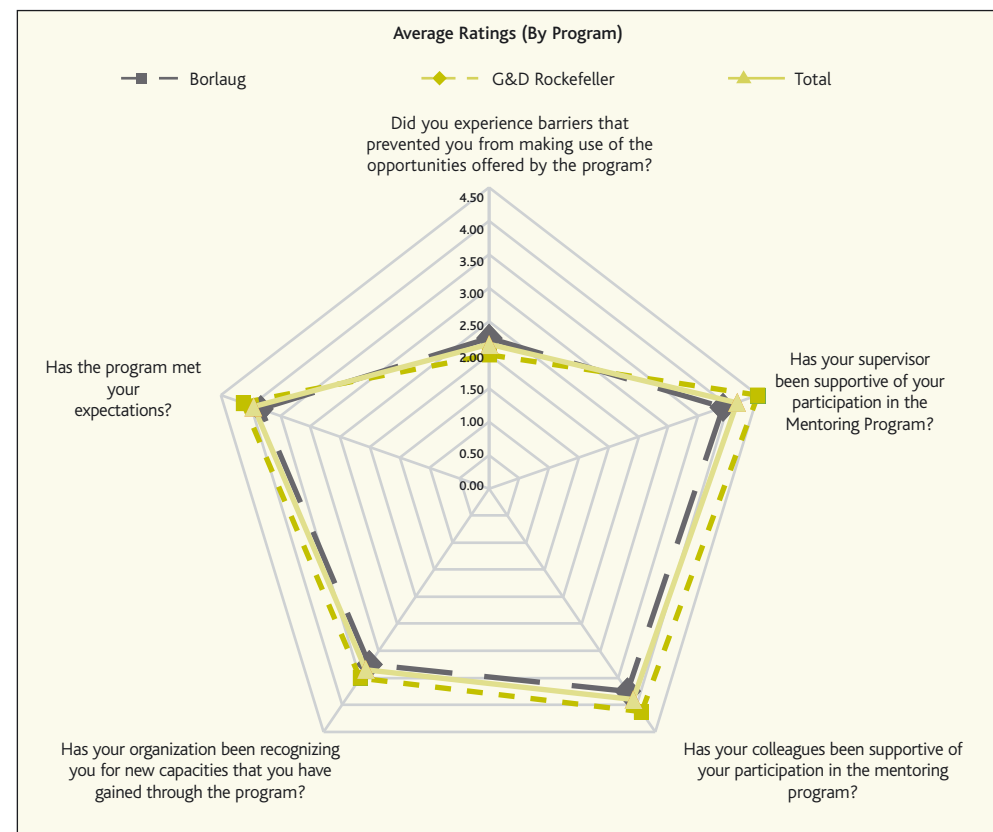
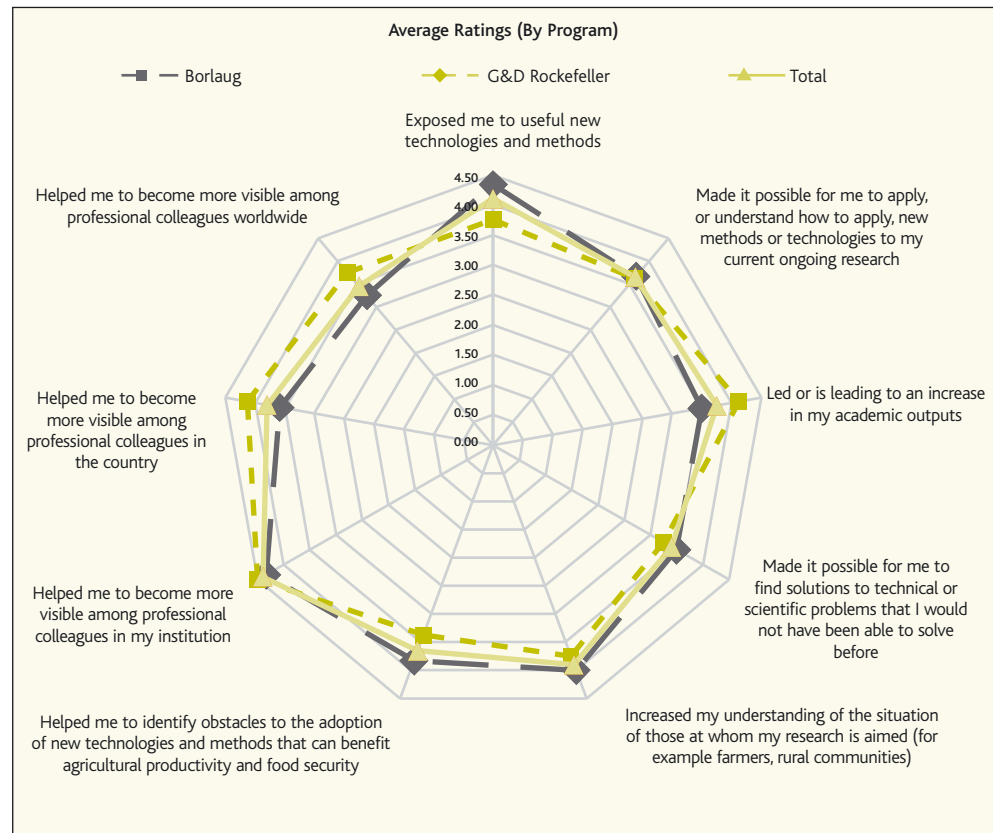
NOTE: These graphs display the average rating of fellows in certain comparative categories. Positive ratings are closer to 4, negative ratings are closer to 0. Block arrows indicate where the average difference was found to be statistically significant.

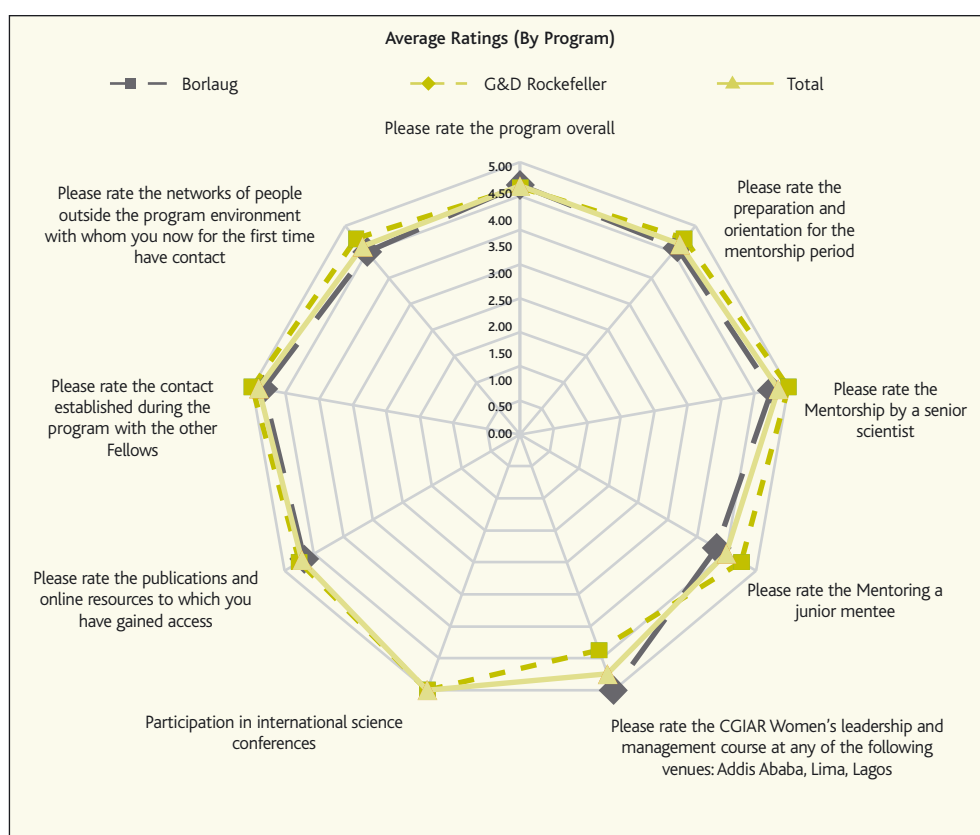
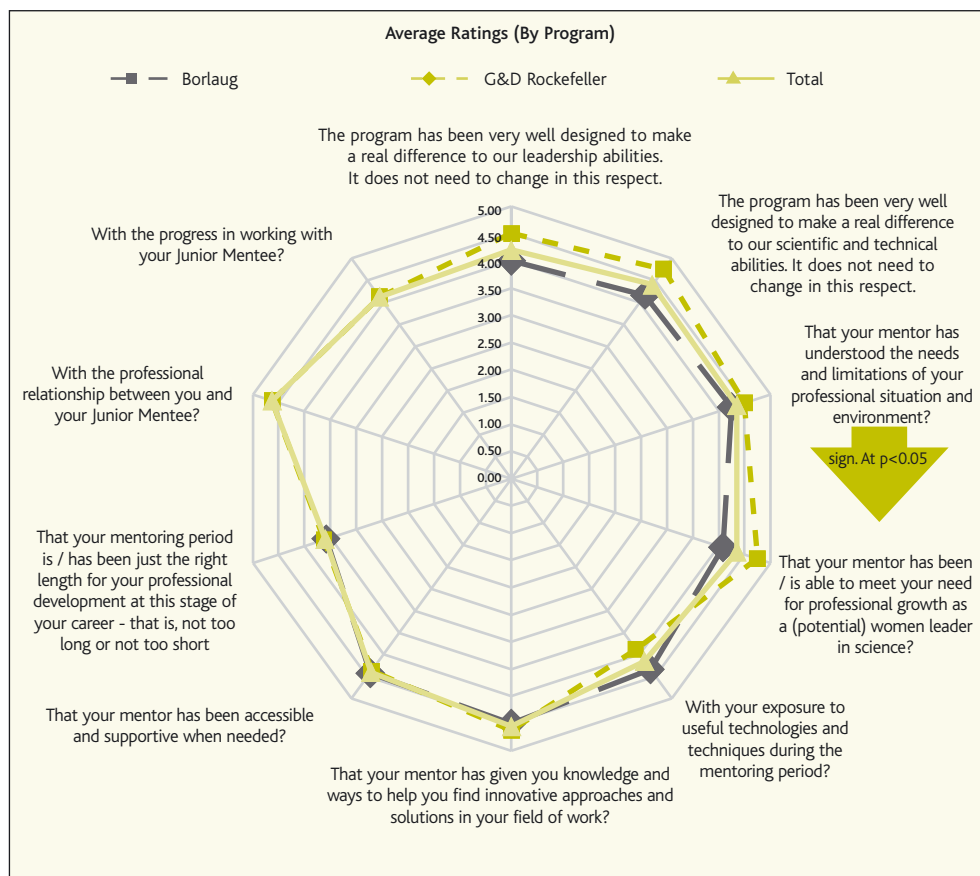


***NOTE:** Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

FIGURE 10 Comparison of Program Ratings*

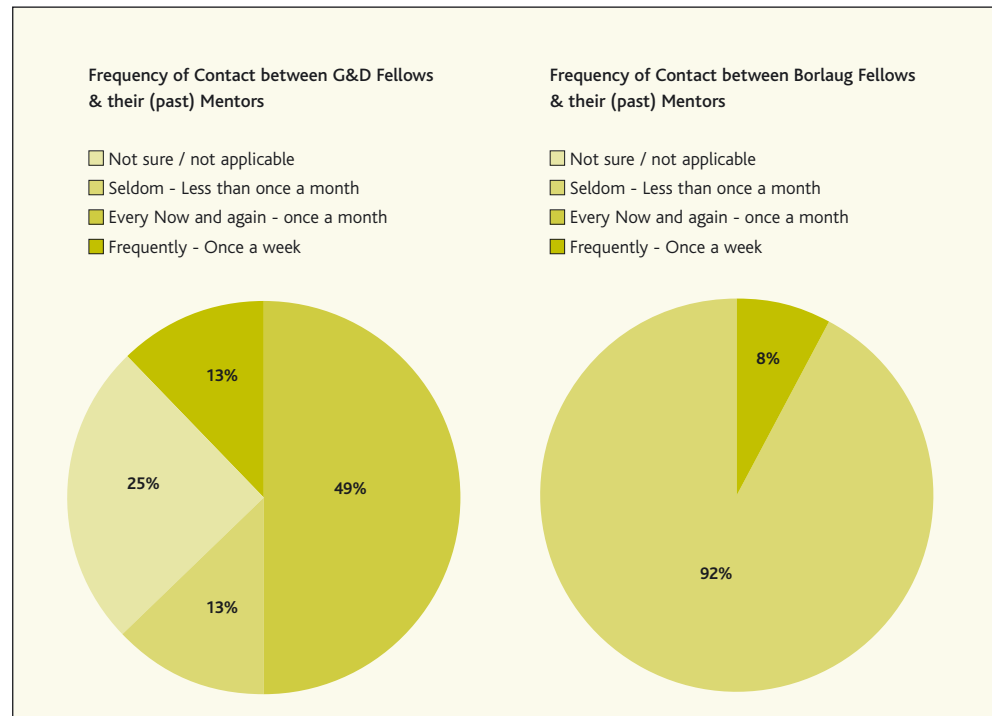
NOTE: These graphs display the average rating of fellows in certain comparative categories. Positive ratings are closer to 4, negative ratings are closer to 0. Block arrows indicate where the average difference was found to be statistically significant.





*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 11 Frequency of Contact between Fellows and their Mentors*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

The G&D Program’s use of an African mentoring coordinator, a local steering committee, and African mentors and junior mentees who were regularly asked for their input to direct and help improve the program helped create greater understanding and ownership of such an intervention in Africa – an important element of sustainability. This web of people helped shape the program. They became not only advocates for the program, but more expert in what could be done through women-in-science programs. There are several examples where G&D Mentors and G&D Fellows were influencing or planning to influence similar or related initiatives in their organizations or communities, based on what they learned in the fellowship program, which added to the ripple effect.

The main area for improvement in the Borlaug Program was perceived to be the short (4-6 week) mentoring period coupled with lack of appropriate follow-up. While many fellows admitted that it would be a struggle to stay away from their families for a longer period, only 17 percent were very satisfied with the duration. More significantly, in both past reports and interviews, the length of time spent in the US was the aspect most criticized by the fellows as well as by a number of the mentors. They felt that the time needed to adapt and for the extensive on-campus and field engagements during the first two rounds left little time for substantive scientific work. Exposure to new methods was appreciated but the fellows needed more time to study, especially given the different circumstances and infrastructure in African institutions and communities. Most expressed preference for a 3-12 month engagement. A majority of the G&D respondents also suggested that the period should be changed, but the interviews showed that these were much more tentative opinions of what could possibly work better, and that they were generally quite satisfied with the two-year contact period.

The selection of target groups

Was the program designed to attract and retain the right target groups for convincing and sustained results?

The quantitative data confirm that age, seniority and qualifications lead to significant differences in perceptions of the value, effectiveness and sustainability of different program elements. For optimal results, it would therefore be important to fine-tune programs for different target groups. While the qualitative data still have to be analyzed in greater detail, there is an initial indication that younger, less senior women feel they derive greater benefit from the interventions. They might be more pliable and flexible in adapting to new learning and, hence, a better investment over time.

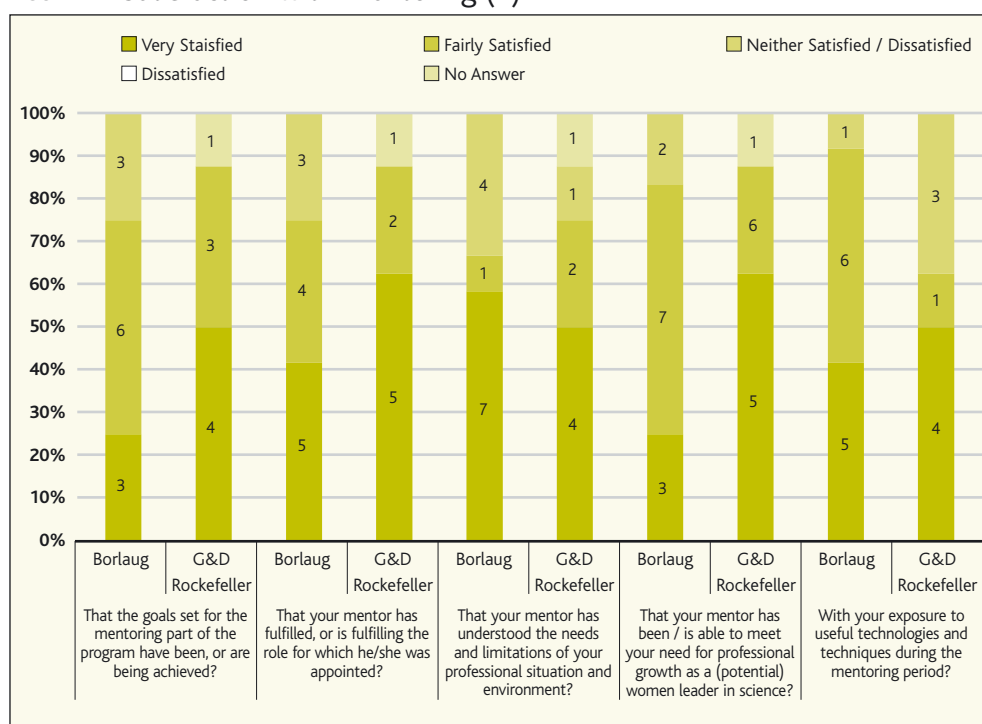
The quantitative data related to family circumstances (living with or without a partner, young children or extended family) are much less definitive. Personalities, attitudes and personal histories may complicate data interpretation. These aspects need to be better investigated and understood and may be a useful focus for follow-up research or evaluation studies.

Design of the mentorship component

To what extent have the differing designs of the mentorship components influenced the results of the two programs?

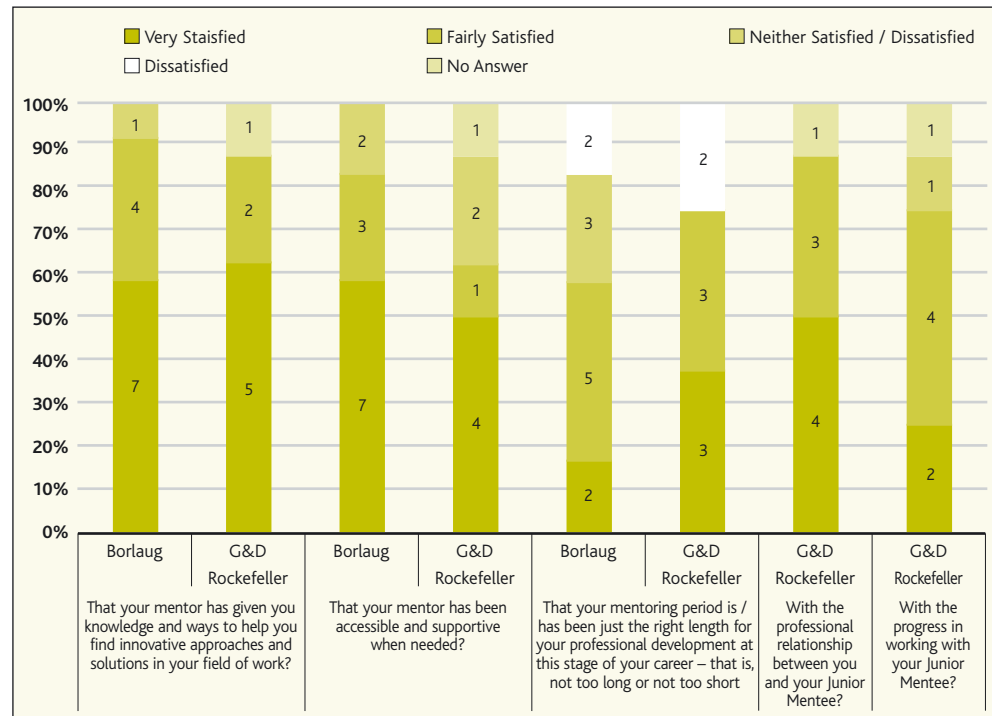
Fellows rate the mentorship component in both programs very well (Figure 12 and Figure 13). Qualitative information confirms that the somewhat less positive perception in several aspects of the Borlaug mentoring component was due to i) the short period of interaction and lack of dynamic follow-up opportunities after returning from the US, and ii) the fact that the scientific fields of the mentor and mentee were not always matched and thus the relationship did not match their expectations of gaining relevant scientific skills during the few weeks of interaction. In spite of this, it is clear that both fellows and mentors made the best of the given situations.

FIGURE 12 Satisfaction with Mentoring (1)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 13 Satisfaction with Mentoring (2)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

More findings on this important component are given elsewhere in this report. The reasons for its success lie primarily in the design. In a meta-review using theory-driven realist synthesis of 25 mentoring programs, Pawson identifies three core concepts to explain why certain mentoring partnerships flourish better than others, namely: i) status difference, ii) reference group position, iii) mentoring mechanism.³⁰ Both programs adhere to most of the positive aspects. There is one distinct difference, relative to Pawson’s “golden rule” that gives the G&D approach an advantage. According to Pawson, whatever the policy setting, the objective of the program or the position of the mentors, it pays to use mentors who have “been there and done that.” This recognizes that the essence of mentoring occurs when an experienced hand can demonstrate that a mentee is not alone in her situation and that “experience shares well.” This is supported by qualitative information from the evaluation. Many of the G&D Fellows see their mentors as people who have been able to overcome the same obstacles they are facing and, hence, are ideal role models to inspire them.

Implementation

Implementation issues and the program design

To what extent did the implementation of the programs affect their results compared to the potential offered by the design?

In both programs, implementation was done well enough not to detract from their potential. It was interesting how fellows and mentors in both programs struggled to think of any negative experiences or perceptions. Even when implementation did not go according to plan, the detours were small enough not to have a lasting negative effect. The commitment of the management teams (and sometimes the donors) in

both programs was a major asset in this regard, as they tried to learn from weaknesses and make timely adjustments.

The lack of comfortable access to computers and use of the Internet was a perceived constraint in both programs. It is not quite clear whether slow communication was a matter of attitude, infrastructure or lack of time, or a combination of all three. Given the programs' contexts, good use of the Internet is essential, especially for (potential) leaders in science, which essentially is a global venture. Ensuring that fellows have good connectivity should be a priority if they are to capitalize on opportunities.

Successes and challenges: The Borlaug Program

What should have been done differently for better results?

The rigorous selection process yielded very high quality fellows (from 50-60 applications per group) who not only were excellent ambassadors but have also shown excellent commitment to capitalizing on the opportunities offered to them. Given the selection criteria, their profile is somewhat more junior than that of the G&D Fellows in terms of qualifications, age and engagement in their institution.

Of the Borlaug Fellows, only 42 percent agreed or strongly agreed that the implementation processes were well managed compared to 88 percent of the G&D Fellows who responded (Figures 14 and 15). This view was closely reflected in conversations with the mentors. The program faced significant implementation challenges as it had to break new ground yet work within existing frameworks and relationships among the donor (USAID), manager (USDA) and implementers (universities, G&D). The lack of clearly articulated outcomes, well developed monitoring and reporting systems and established procedures added to the strain but also provided flexibility to adapt as lessons were learned.

The matching of fellows with mentors was problematic. In the majority of cases, the scientific fields were related but not well matched and many mentors did not feel well prepared for the ambitious expectations of the fellows. Most fellows found this situation disappointing, as they had expected their scientific expertise to improve. However, mentors and fellows adjusted their expectations and found novel ways to ensure that both got the best out of the visit. Yet, interviews indicated that fellows believe having mentors who are expert in their field is more important than anything else. This is reflected in the significant difference in fellows' perception of the mentors' ability to meet their needs for professional growth (Figure 12 and 13).

The mentoring workshop which was attended by the first group of Borlaug Fellows did not yield significant benefits and did not stimulate continued contact between the fellows and their mentors. Although several found it useful, its timing and relevance primarily to the G&D approach made this the least appreciated program component. However this does not mean that such a component could not be valuable if the design and implementation were improved. Several fellows and mentors stated that this would be a very useful addition to the program if it were structured to meet the Borlaug Program approach, ensured that mentor/mentee pair both attend, provided quality time for interaction between the mentor/mentee pair to develop a shared understanding of what should – and could – be achieved during this time. There is no need to have such a workshop in Africa; the essence is to get the pairs (preferably the whole group) together to spend some time (even if just a few well-designed hours) in a

FIGURE 14 Perceived effectiveness of the Borlaug Program*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

“closed” environment before their scientific collaboration starts, in order to develop a rapport and define expectations.

A majority of mentors interviewed were of the opinion that they should have been better informed on the larger program objectives and context, with a clearer idea of what was expected in terms of outputs and outcomes.

Mentors were self-selected (with encouragement from their institution facilitators and the Borlaug Program staff, based on fellows’ areas of interest) and, hence, mostly self-motivated. However, an incentive was provided through a salary addition for the release of mentors’ time. Yet a few mentors who were in line for tenure felt that they did not have the full support of their departments as the fellows did not have a high profile in the universities and were therefore not a priority. Some questions remain about how to best mobilize larger numbers of appropriate mentors, should the number of fellows increase.

For the participating US universities in Groups 1-3, the central university office support was commended by all as highly efficient and empathetic. A few logistical problems had to be addressed. The USAID TRAINET visa system caused early frustration and delays. Several fellows were unhappy with having to share rooms and pay the overweight luggage costs for books, the pregnancy of one fellow caused concern in her university, and the first round of travel (via Nigeria) was taxing. Most of these hiccups were used to learn and improve next rounds.

The program would have benefited significantly from more rigorous monitoring and documentation of progress, and formal reporting not only for accountability but for learning and more effective adaptive management. Progress reports that were to be submitted quarterly were, instead, replaced by verbal reports given during USDA/

USAID meetings. This blurred and weakened the lines and procedures for accountability, institutional memory and, especially, systematic learning in this type of program. At times, this was exacerbated by tension among role players concerning decisions and resource allocation priorities.

A number of the fellows perceived their English language skills to be inadequate which presented them with a challenge throughout the program.

It is less likely that mentorship – in the true sense of the word – can be achieved when the mentor is on another continent and has not had similar or shared experiences with the mentee. The concept of “mentoring” in this program perhaps is more a “relationship” as intended in the Borlaug concept – focusing on research exposure and collaboration between a junior scientist and a senior scientist from different environments.

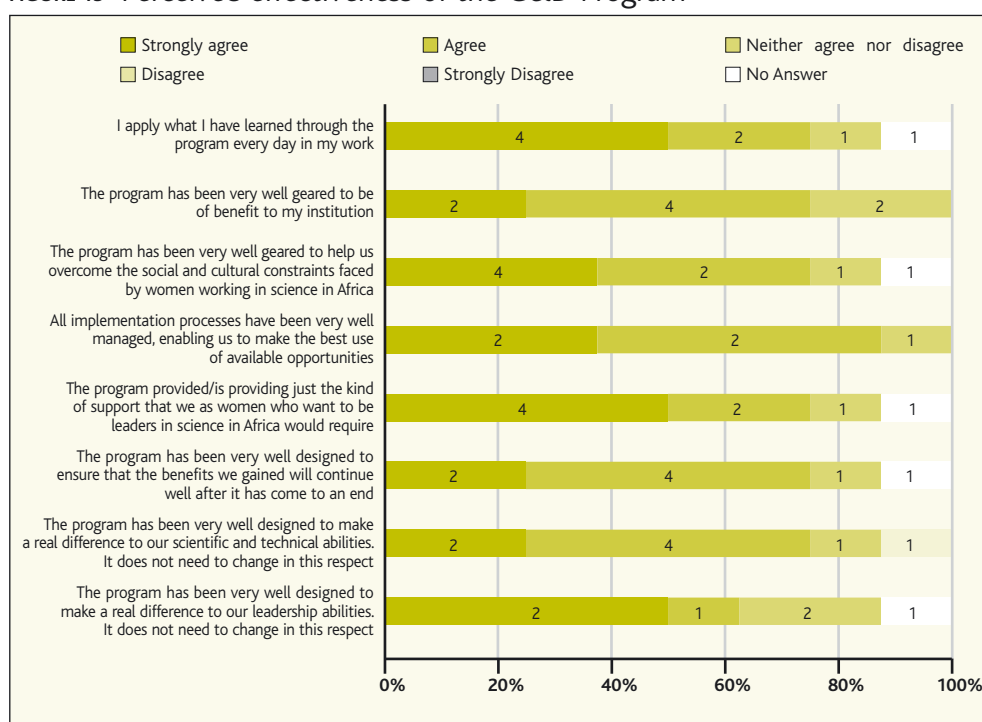
Successes and challenges: The G&D Program

What should have been done differently for better results?

The selection of fellows from around 100 applicants per round³¹ was handled very successfully through a rigorous rating process of short-listed candidates, using criteria approved by the Steering Committee. The performances of only a few fellows have been somewhat less than expected.

Of the G&D fellows who responded, 88 percent agreed or strongly agreed that the implementation processes were well managed (Figure 15). During interviews, fellows and mentors heaped overwhelming praise on the G&D Team and G&D Coordinator for their efficiency, care and high standard of work and events. The management team and structure were regarded by a majority of informants as one of the critical success factors for the program. This is in line with the evaluator’s experience elsewhere

FIGURE 15 Perceived effectiveness of the G&D Program*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

31 For number of rounds completed, refer to Annex 2.

and emphasizes how important efficient and nurturing management is for capacity-building programs – despite increased management cost and time.

The reporting and accountability lines and procedures as well as the institutional arrangements were clear and worked well. The thoughtful advice provided by the Steering Committee – which included representatives from the donors, the management team, related programs and leading women scientists – had a significant influence as the program unfolded.³² The Coordinator was seen as essential local “glue” who connected the different program components.

There was significant difference of opinion on the best mentoring period. Although half of the survey respondents felt that the program could be extended to three years, interview information indicated satisfaction with the current two years. There seemed to be roughly three phases: six months of a foundation phase to establish goals and plans and build trust; 12 months to address institutional and professional relationship issues, build skills and work towards concrete outputs such as conference presentations and publications; and six months of exit phase, during which the mentor engagement and advice were slowly phased out.

The distance between mentors and mentees proved to be problematic if it required more than two hours of transportation to get together. Yet, six pairs were between 50 and 200 km apart and another six were more than 200 km apart, three of them in different countries. This complicated and limited face-to-face contact, given the limited time and money for such interaction.

Meeting expectations

To what extent did the program as implemented meet participants’ expectations?

Qualitative data indicate that mentors’ expectations have been generally met (although many did not have well defined expectations). The G&D Fellows were more certain

FIGURE 16 The Degree to which the Programs met Participants’ Expectations*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

32 The Committee met only twice, but continued to interact by email and telephone.

that their expectations had been met. In fact, 50 percent of G&D Fellows, 17 percent of Borlaug Fellows and 14 percent of G&D Junior Mentees felt that the program completely met their expectations (Figure 16).

Qualitative information shows that the less positive response of the Borlaug Fellows was related to their ambitious expectations from the mentoring period and points to a lack of preparation or understanding of what was possible during that period. Fellows from academic institutions were significantly more satisfied than those in other research organizations, but this might have been due to other factors that were not investigated. Figure 17 clearly shows that there are significant differences in experience between those institutions classified as “academic” and others, although the small number of respondents indicates once again the need for further study of these differences.

Among the junior mentees, only 14 percent were of the opinion that their expectations were being completely met – 64 percent felt expectations were being met to a significant extent and another 14 percent to some extent (Figure 16). Without qualitative data, the reason for the lack of complete satisfaction is not clear.

Although the G&D Program experimented by choosing an entrepreneur as a fellow, it is patently not geared to the needs of this target group and finding appropriate mentors was a particular challenge.

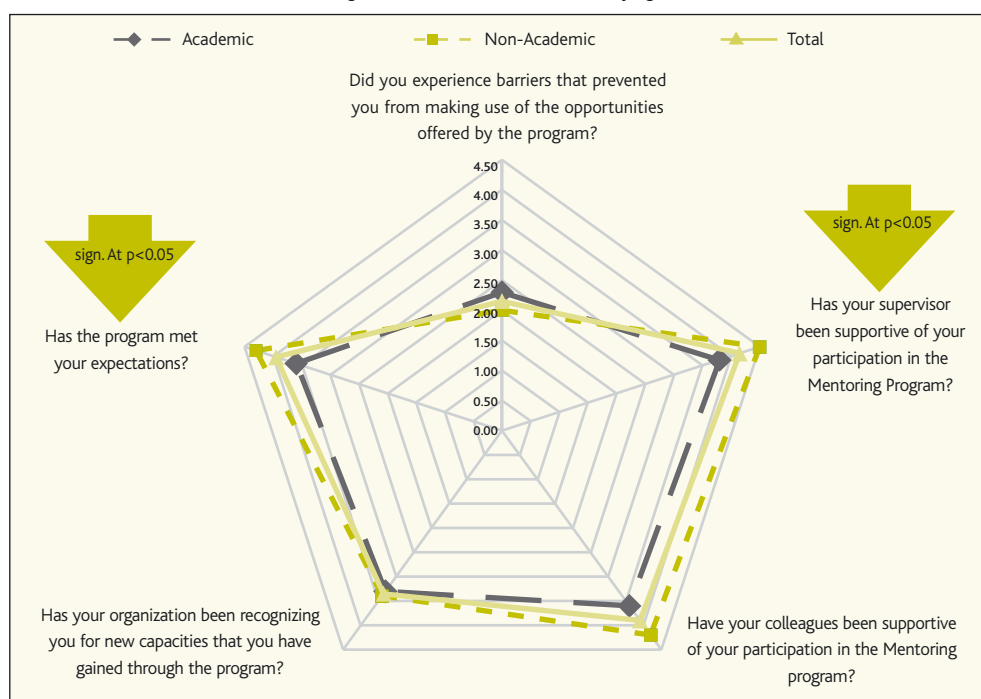
Use of G&D resources

To what extent did the G&D resources contribute to the observed effects of the programs?

Data of this nature tend to be somewhat tentative, but the G&D resources appeared to be popular in both programs and were frequently mentioned in interviews as a main

FIGURE 17 Selective Comparison of Average Fellows’ Ratings*

*NOTE: This graph displays the average rating of fellows in certain comparative categories. Positive ratings are closer to 4, negative ratings are closer to 0. Block Arrows indicate where the average difference was found to be statistically significant.



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

advantage of participating in the program. Most fellows professed to use them about once a week, except for the database of researchers to which they refer much less frequently. G&D Fellows appeared to be more frequent users of the resources. For example, up to 88 percent of G&D Fellows and 68 percent of Borlaug Fellows professed to using the G&D's online newsletter, G&D News, at least once a week. G&D's newsletter, Funding Opportunities, was the only resource used with almost the same frequency by fellows in both programs. Some sharing of the resources among colleagues again invokes the ripple effect. Between 30 and 50 percent of fellows in both programs note that they share a G&D resource with others at least once a week.

Cost-benefit

Compared to the benefits, can the cost of the programs be justified?

Given the importance of programs that empower women to have confidence and lead, and the results to date from the Borlaug and G&D Programs, it is clear that a simple cost-benefit calculation at this stage will not capture the full story. One woman whose life is transformed through one of these programs may go on to change her country's development path in agriculture, develop a breakthrough technology or assist a community in overcoming poverty. Or the effects of the programs might fade away very quickly as broader systemic challenges overpower the positive results.

Preliminary calculations estimated the total cost per fellow at between US\$26,000 and US\$35,000, with the G&D Program at the higher end and the Borlaug Program at the lower. This will need follow-up work, as neither a detailed study of the costs nor a comparison of how the costs compare to other similar programs was made. It is difficult to put a value to the difference in cost between the two programs. Apart from the much longer engagement with the fellows and their exposure to opportunities, the ripple effect of the G&D Program on junior mentees and senior mentors significantly adds to the benefits for African development. Furthermore, the overhead management cost of the G&D Program is significantly lower than that of the Borlaug Program, yet the G&D Team is known for its efficiency, its engagement with all participants, the intensity of its communication and contact, and for nurturing its fellows throughout their two-year cycle. This is seen by many as one of the critical success factors of the program. The G&D Program also has more intensive monitoring and documentation systems as well as additional components such as its Enhancing Leadership: Negotiations Skills For Women Course. A better understanding of the value added by these elements is needed before any judgment can be made about relative cost and benefits.

Much in business is based on intuition and varying degrees of risk. It should be the same in development, especially where results are hard to measure. If the effects to date on the individual women are considered, there is significant potential for a major return on investment. A pragmatic approach may be to accept that a critical level of input as well as a measure of risk is needed to bring about meaningful change. Lessons should be learned from the past and should highlight the key elements of the holistic approach needed for empowerment and sustained positive effects. The effects of contextual elements should be carefully investigated. These then must be included in the program in order to increase the potential benefits and decrease risk. Management structures and styles should be tight and cost-efficient while allowing for hand-holding which is imperative in empowerment-type programs. Overhead costs should be well justified within this overall approach. Then the investment can be put to the test with a measure of confidence.

Outputs, Outcomes and Impact

What difference have these programs made? Is this in line with what was expected?

Methodological challenges

Assessing the outputs, outcomes and impact of the programs has been complicated by the following.

- Even tangible and observable results may take time to materialize, given the nature of scientific research. Refereed publications, for example, may take up to two years to be published. This is even more so with longer term outcomes, while at impact level (systemic, societal change) these programs may be, at best, only one contributing factor.
- Factors such as national research funding modalities and organizational strategies may affect the enabling environment and cause additional effects. Without a more extensive study of context, the extent of the effects of these cannot be determined. However, the credit given to the program by the fellows as well as the timing of the significant increases in key indicators point to substantial program influence.
- Many results will only be apparent through the perceptions of the targeted individuals. Some results might never become apparent. For example, we may never know if an individual has been inspired by the program to continue with her career instead of focusing on something else.

The nature of capacity-building programs is such that targeted individuals' perceptions of what difference the program has made in their lives is an important source of evidence, albeit to be triangulated (cross-checked) with other methods, observations or documentary evidence. The fact that none of the participants could benefit further from the programs increases the reliability of these findings. Triangulation was done with the quantitative data obtained from mentors, fellows and junior mentees, and with the qualitative data obtained from these three groups plus program managers, donors, implementers and the colleagues and supervisors of fellows. Triangulation of methods proved to be critical, as the qualitative information elucidated and confirmed the trends apparent in the quantitative data.

Outputs

Mobilization of funding, authoring publications or taking over leadership of research teams is the type of output that could be measured as a result of participation in the fellowship programs.³³ However, any data would need to be viewed in the context of the low number of respondents and the short tracking period. In addition, it is difficult to attribute increased outputs to any particular initiative without carefully eliminating other factors that had the potential to contribute to the output. The timing of trends – coinciding with the program-support period and afterwards – as well as triangulation of participants' (fellows' and mentors') opinions and experiences were used to determine whether there was adequate reason to attribute the change to the interventions. Although a more nuanced, detailed analysis might be needed over time, some patterns have emerged.

33 Detailed data of this type of activity, dating from 2006 to 2008, can be seen in Annex 7, "Evolution of Outputs".

There is an upward trend compared to the situation in 2002-2004, with significant increases in a number of indicators in 2006 and/or 2007 and with interesting variations among the different groups in each program (graphs in Annex 7). The main overall trends are the following.

- G&D Fellows' outputs are usually measured from a higher base than those of the Borlaug Fellows, confirming the former group's seniority and longer experience as scientists in the system.
- In both programs, there has been a significant increase in the number of research grants mobilized (Figure 22 in Annex 7)³⁴ and in the number of publications in refereed journals (Figure 23 in Annex 7). There is an accompanying decrease in the number of publications in non-refereed journals.
- Judged by their participation in task teams and committees as well as leadership of teams, the Borlaug Fellows' profiles are increasing in their own institutions (this may be part of the natural career path and less to do with the fellowship) but much less so in Africa and internationally. In the case of the G&D Fellows, their leadership in their own institutions and countries has increased somewhat, but much more so in Africa and internationally (Figure 26 in Annex 7). This is in line with the G&D Program's focus on creating opportunities to raise participants' leadership profiles in Africa and other parts of the world.
- For the same reason, the G&D Fellows made a number of conference presentations in Africa and internationally, while the Borlaug Fellows did not have the same opportunity (Figure 25 in Annex 7).

The combined picture created by the output trends during this period is of positive results that seem to be in line with the intent and timing of the programs (in other words, when concrete results could be expected to appear) and confirms the qualitative information received from fellows during interviews.³⁵

They also confirm the effect of those components in the G&D Program that are most likely to have contributed to these changes: i) nurturing by mentors that, according to interview information, tended to focus on issues such as how to fundraise, how to write publications in accredited journals and how to prepare effectively to make the best impression and get the most out of international conferences; and ii) exposure to international opportunities that can raise fellows' profiles and enhance their experience and enthusiasm for the work they do.

Outcomes

The survey information confirms the fellows' very positive perceptions of the programs' impacts on their soft and hard skills. Both G&D Fellows (88 percent) and Borlaug Fellows (68 percent) believe that their program has excellent potential to make a real difference in their ability to overcome the challenges and constraints of being a woman in science in her country.

The impact stories highlight the many changes that fellows believe have been brought about by the programs. Selected examples of the stories, found in Annex 8, speak for themselves about the nature and extent of the changes and should be read for an

34 In the G&D Program, one fellow mobilized a significant number of grants, somewhat skewing the data.

35 As other contextual factors have not been eliminated, this cannot be said with certainty.

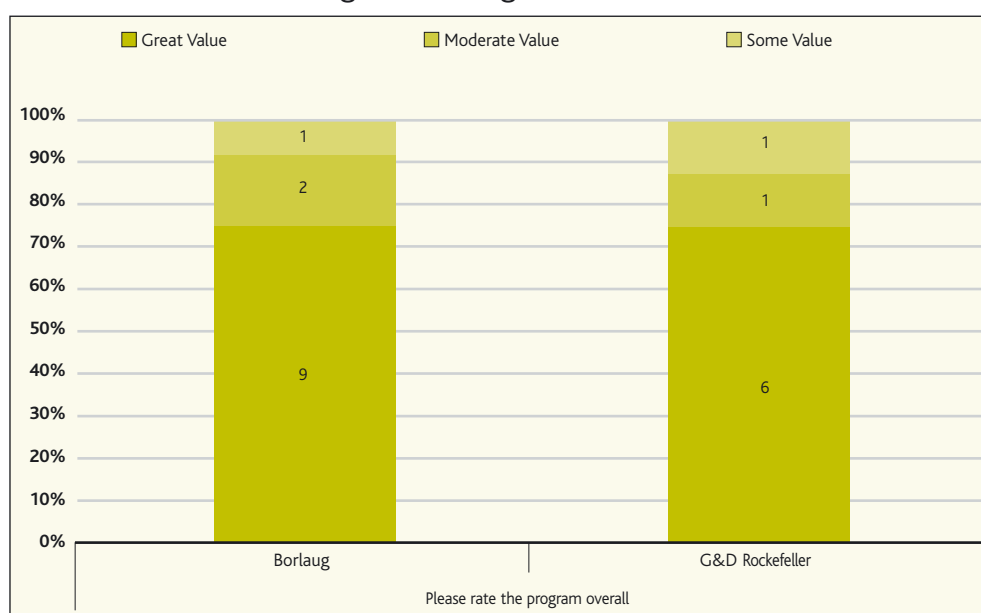
appreciation of the difference the programs have made. They also highlight how the programs' components seem to have reinforced one another to give the results. In other words, it is the package that counts.³⁶ Implementing just some of the components in each case would not significantly diminish the effect.

The survey data paint a similar picture. In every component of both programs, more than 70 percent of fellows who participated believed that it was of great value. Of the G&D Fellows, 100 percent judged the mentorship, the participation in international conferences and the networking with other fellows as great value. The only significant exception was that only 25 percent judged the follow-up period after the Borlaug Program mentorship as of great value (Figure 4 and Figure 5). The rating of the overall value of each program was almost identical, with 75 percent of fellows in both confirming that it was of great value, and 17 percent of Borlaug Fellows and 13 percent of G&D Fellows rating it as of moderate value (Figure 18).

There is little significant difference in the perceived effects of the two programs. The stronger focus of the Borlaug mentorship component on gaining scientific knowledge and techniques is highlighted by the different nature of the fellows' impact stories for that component. This is less clear in the quantitative data. The G&D Fellows' formal mentoring of junior scientists is also perceived as having increased the fellows' ability to guide others. Several Borlaug Fellows have taken on informal roles as mentors to junior staff members which, again, highlights the potential ripple effect of the programs.

As can perhaps be expected, the fellows believe that the positive effects from their programs will be sustained. More than 80 percent of fellows in both programs are of the opinion that their program has excellent potential to have a very significant positive influence on their professional development path in the medium to long term (Figure 19). They continue to apply what they have learned in their work. Of

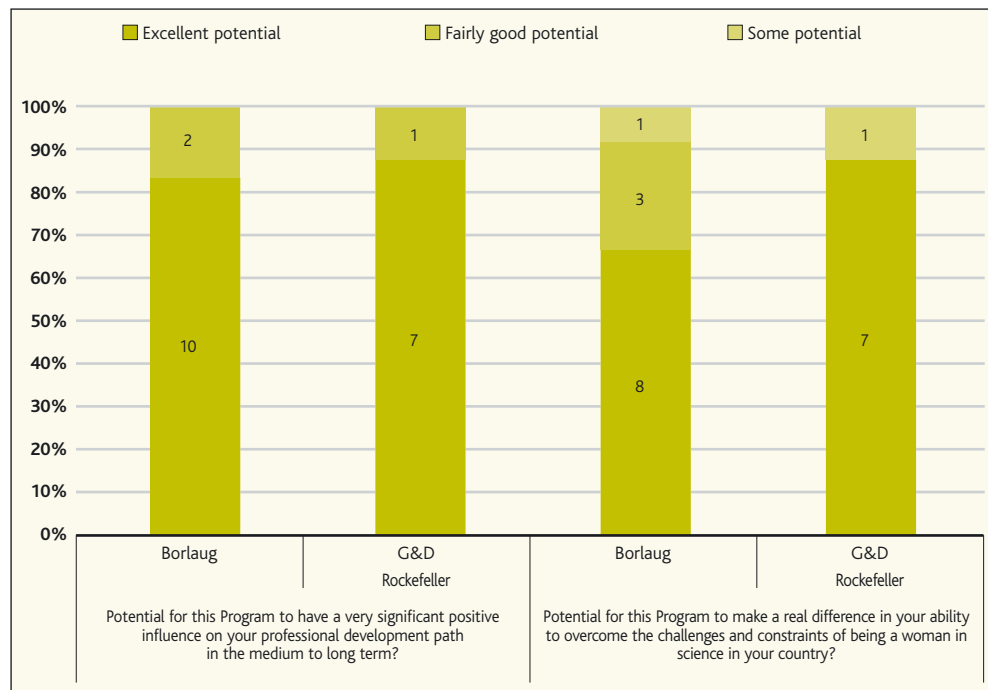
FIGURE 18 The Overall Ratings of the Programs*



*NOTE: Due to the small number of persons involved the data should not be interpreted in isolation of the relevant qualitative information.

36 This is confirmed by additional data on which components had influenced them in what way.

FIGURE 19 The Sustainability Potential of the Program*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

the Borlaug Fellows, 42 percent report using some of what they have learned almost every day; for the G&D Fellows this figure is 38 percent. Their new knowledge is used only occasionally by 33 percent and 25 percent, respectively.

Qualitative information provided by the mentors indicates that they have also gained benefits from the program. In the case of the Borlaug Program, mentors gained insight into the circumstances of women scientists in Africa and mentors in the G&D Program learned of the conditions in the NARIs and universities. In both cases, collaboration opportunities have opened up. Some of the G&D Mentors believe they have grown professionally in the process. Most importantly perhaps, several G&D Mentors have undertaken to contribute to their institutions' gender or equity programs, or to stimulate interest in establishing such programs in their institutions – again the ripple effect.

The changes in the fellows seemed to be visible, as also noted in their impact stories. Yet, it is somewhat surprising that 25 percent of the G&D Fellows noted that people commented on changes in their attitude, abilities or knowledge “almost every day.” Forty-two percent of Borlaug and 13 percent of G&D Fellows experienced this “every week” and another 33 percent and 38 percent, respectively, “once per month.”

Information obtained from 15 of the fellows' supervisors and colleagues confirmed that changes have been visible. Of those contacted, 77 percent were male, usually in senior positions in the organization. Several senior colleagues and, in particular, direct supervisors appeared to be interested in being in more powerful positions regarding the fellowship arrangements. The fellows' self-assessment of observable changes through the program was confirmed in 70 percent of the cases. Without more time for qualitative data gathering, it was not possible to determine the reasons for those cases where opinions differed.

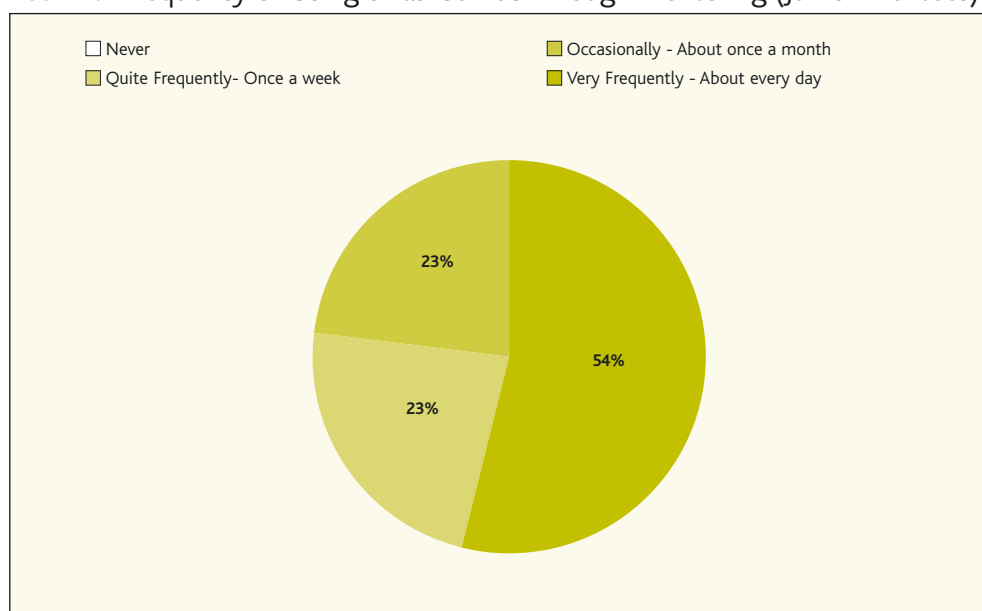
While 54 percent of the junior mentees professed to using their skills gained through the mentoring almost every day, only 36 percent agreed strongly that the mentoring activities had been well designed to meet their purpose, and only 60 percent agreed that this is the best support they could have at this stage of their careers. As more junior staff, they clearly had a larger variety of needs at this stage in their careers (Figure 20 and Figure 21).

Unintended consequences

Were there any negative or unintended consequences? Why did this happen?

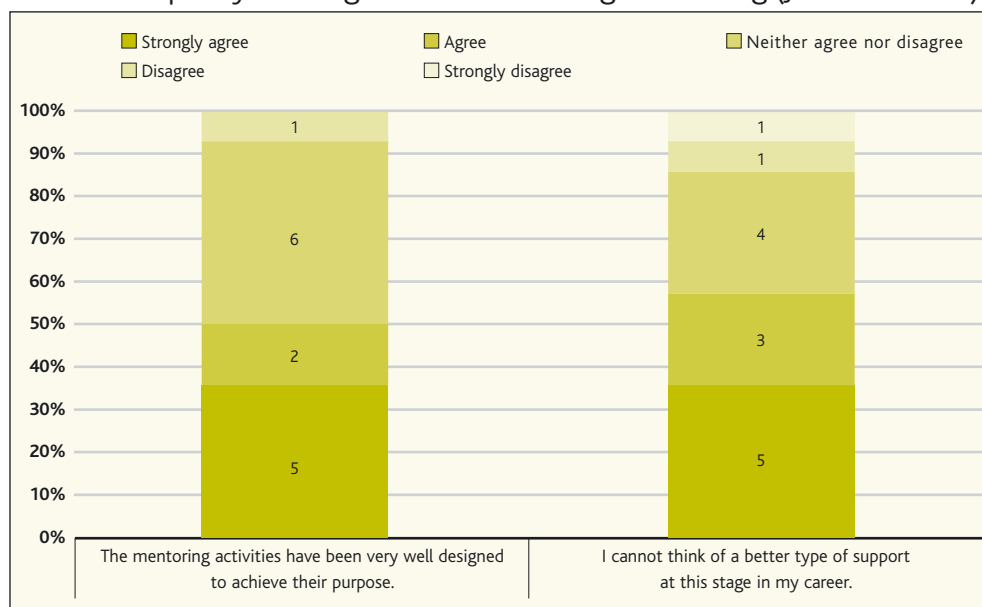
Few unintended consequences were found, but may provide an early indication of what to track when programs are transferred or scaled up. The reasons for these were not investigated in any detail but may be apparent from the available information.

FIGURE 20 Frequency of Using Skills Gained Through Mentoring (Junior Mentees)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 21 Frequency of Using Skills Gained Through Mentoring (Junior Mentees)*



*NOTE: Due to the small number of persons involved the data should not to be interpreted in isolation of the relevant qualitative information.

Positive:

At least five mentors and fellows noted that they either wanted to start a related initiative in their own institutions, had been approached by their colleagues or supervisors to do so, or were helping their institutes for gender studies or equity programs to establish or improve ongoing initiatives.

In his own words, a male mentor from Africa drastically changed his opinion about women while participating in a mentoring orientation workshop:

“I was touched. My eyes opened to how badly women are being treated in our society. I learned how to interact better with them. It even affected my relationship with my wife at home. What I learned about personalities and culture made a big difference to my life. It is like a liberation.”

Negative:

Fellows reported two cases of colleagues becoming “jealous” of their participation in the program, and at least two more experienced a backlash by (male) supervisors. Several interviews with supervisors and colleagues confirmed that they would have preferred to be engaged, and questioned the basis for selection of a particular candidate. Such a backlash clearly could lead to serious consequences for the women if supervisors and colleagues are not engaged more effectively.

Impact

It was too early to assess the larger impact of the programs on society. This will only be detectable by studying the career paths and performance of the fellows in each program with a thorough emphasis on, and understanding of, the other contextual factors that affect them over time.

The Borlaug Program donors and designers in particular were interested in how the program could affect agricultural productivity as well as other aspects of their careers in the longer term. It would be too ambitious to believe that this could be possible in the short term.

If the women who have participated in these fellowship programs are to make any significant impact over time, their pathways will contain at least some of the following.³⁷

- Scientific careers – All have the potential to use the increased confidence as well as leadership and scientific expertise they have gained to accelerate their career paths. This will also serve to keep them in the research system as leaders who are self-aware, strong and secure enough to overcome organizational, societal and cultural barriers and obstacles, and who have the required scientific expertise and exposure to enhance their profiles and credibility in their chosen fields.
- Government – Some will move on to positions of power in Africa in areas of national policy making, strategy implementation and systemic institutional change.
- Community support – All will have empathy with, and focus some of their attention on efforts that can support i) meritorious women in the system and those with

37 This pathway was identified using, inter alia, the inputs of fellows and mentors.

potential, as well as ii) the interests of the people served by their science, such as (subsistence) farmers, the communities around them, and/or those who can scale up and implement technologies that can make a real difference.

- Global outreach – They will continue increasing the number and quality of scientific/technological outputs over time, collaborate worldwide and bring lessons from abroad back to their own environments.
- Mentoring – They will guide and mentor others and influence the systems in which they work to value and nurture women and to conduct work of quality and relevance, whether in the academic, research, policy, government or private sectors.

Over time they and/or those they influence will produce products, processes, policies, strategies and initiatives that will have a significant impact on the sector in which they work. But a critical mass of women scientists will be needed. It is therefore important to scale up these initiatives and especially to develop strategies that can ensure institutional and systemic change that will help ensure sustained progress.



Lessons and Success Factors

4

Many lessons can be drawn from the findings of this evaluation. Program stakeholders are encouraged to identify as many of these as possible. The following highlights only those considered by the evaluator as most important for the success of interventions aimed at empowering women scientists.

Designing effective empowerment programs for women scientists

1. Sustained attention to the softer skills of being a scientific leader – such as writing good quality publications, leading teams, cooperating across institutions, raising funds to conduct the work and communicating effectively with colleagues – makes a real difference in the lives and performance of women scientists. This is especially possible when mentors: i) have contexts and experiences similar to their mentees and can guide them over a prolonged time through a number of diverse challenges in their professional lives; and ii) have information and opportunities to “practice” these skills.
2. Holistic, integrated approaches empower and build capacity. No single component of the intervention will give adequate results. Instead, it will require several mutually reinforcing components that enhance the soft as well as the hard skills for scientific leadership while also providing new opportunities and information that help build confidence, profile, and social and professional support networks.
3. Effective interventions in this field nurture a balance between the “glamour of leadership” and the “love of science” and, as a result, provide opportunities to experience the “glamour of science”. This is reflected in, *inter alia*: i) exposure to international facilities and events that stimulate new approaches, high quality work and publishing; and ii) professional networks and associations that serve as communities of practice as well as support structures.
4. Effective components that develop and cultivate self-confidence and self-awareness, and open new horizons in thinking, experience and contacts are critical for success. A brief exposure to international experts, facilities and methods is inspiring and opens new horizons. However, understanding how to apply the learning under local circumstances and maintaining momentum afterwards are challenges that should receive special attention during program design and implementation.
5. Agricultural productivity is likely to require women who are not only knowledgeable in science but are confident and have the profile, position and opportunities to make a difference. Developing soft skills effectively is therefore a valuable, if not essential, addition to any program aimed at developing scientific prowess.³⁸

³⁸ In the experience of the evaluator, not all soft skills or leadership courses yield similar results. The quality of such courses has to be carefully scrutinized to ensure their effectiveness.

6. Interventions that provide mentoring support during a range of challenges and obstacles on a woman scientist's career path – and thus support her during a period of several (2-3) years as her scientific and leadership capacities and situation evolve – have a better chance of yielding enduring results. Building scientific skills during a structured engagement period with components that bring new vigor while also adding stimulus for a next phase of development (such as the leadership, mentoring and negotiation courses, and conference attendance), and with a distinct exit phase during the last six months seem to increase potential for success.
7. Interventions that focus on individuals, rather than the institutions and systems within which they work or live, should take great care to implement strategies that have the best chance of sustaining positive benefits and that may have a ripple effect on their environments. This includes activities that bring about *real long-term change* in individuals by i) addressing some of the main immediate and underlying causes of their disadvantaged positions, and ii) connecting them to information sources as well as support and expert networks (communities of practice, women scientists support groups) that can sustain them once the intervention is terminated.
8. Focus on the fellows' institutions is essential. Even if only to engage senior persons from the beginning, this would serve to create more ownership of the program, build understanding of its potential benefits for the institution and identify pathways to ensure that the seeds are sown for anchoring and embedding some of the core concepts within the institution. Not doing this may cause a backlash against the program participants.
9. Courses and exposure opportunities (e.g. conferences) that are of high quality and truly relevant and responsive to participants' needs require, *inter alia*: i) course and program designers who have empathy with participants as well as intimate knowledge of their circumstances and challenges; ii) content and approaches that strive to be innovative and build on the latest available knowledge; and iii) initiatives that, adapted during implementation as lessons, are learned and thus piloted and tested with care and continuously improved, based on careful consideration of very well designed feedback from participants as part of systematic monitoring and evaluation.
10. Results have to be monitored and measured in both qualitative and quantitative terms – one should not be seen as more credible or important than the other. The earlier this is implemented during program design and execution, the better, and should include a search for unexpected consequences and results.
11. Investment in transforming people and institutions requires donors to recognize that tangible benefits may take years to appear. Those who desire true development must be willing to beat convention and take an investment risk for the sake of sustainable results that may have benefits far beyond the immediate.

Implementing effective empowerment programs for women scientists³⁹

12. Implementation should be driven by a highly capable team with the commitment, if not passion, to nurture and support, yet maintain a firm hand on what is possible and desired within the frame of the program. In a larger program, significant attention will have to be paid to ensuring hands-on management while still retain-

³⁹ Those factors marked with a * may become complicated when scaling up such interventions.

ing the necessary common vision, capability, drive and other key success factors within the institutional set-up.*

13. Structured engagement of knowledgeable stakeholder representatives – for example through a steering committee – establishes and maintains a common vision, increases ownership and awareness, and has a good chance of helping the program evolve in the right direction.
14. Defining the target group and ensuring appropriate criteria and selection processes for the particular purpose are critical. Accommodating the target group's individual capacities, qualifications, level of commitment, age, experience and seniority in the organization may require changing strategies or designing different interventions. Therefore, the target group should not be too broadly defined. For example, differences in experience level or age should not be too broad, or academic researchers should not be mixed with entrepreneurs.*
15. Motivation of participants is an important consideration if success is to be achieved and sustained. Mentee applicants have to be self-selected, self-motivated and driven by motives larger than their own self interests. Self-selection of mentors not driven by material incentives will increase the chance that they have the right motivation, personality and approach, yet incentives cannot be ignored, as most successful mentors will be very busy people with many other priorities.*
16. Matches of mentors and mentees should be based not only on personality and values, but also on their scientific fields. The latter is not essential, especially where there is a long-term engagement, but where good scientific matching is not possible there should be a worthwhile, value-adding compromise that can still strengthen the fellows' scientific and leadership skills. For example, this could focus on proposal and publication writing, fundraising, presentation, research planning and management and creating awareness of the broader implications of their field of work on policy and on the groups their research targets. Ideally, mentors should be role models who are seen to have had their own experience of the challenges and constraints faced by the mentees.*
17. Strategies are needed that nurture a proactive instead of reactive culture once mentors and mentees are busy and away from the euphoria caused by course activities and international exposure opportunities. Small as well as large irritations should be addressed, especially those that may prevent action and communication, such as Internet connectivity, or lack of money or time for pairs to meet when they are a significant distance apart. Face-to-face meetings are critical for success and ideally mentors and mentees should not be more than two hours apart by car or public transport.
18. Clear goals, simple logistics and an appropriate and productive preparation period significantly increase satisfaction and chances of success. The G&D approach provides an excellent example, with a 360-degree evaluation of fellows, excellent written materials and guidance provided beforehand, and opportunities for initial communication between mentor and mentee before their joint activities start.*
19. Provision of safe environments and opportunities where women feel comfortable to share and learn is imperative. Establishing trust among key role players (program implementers, mentors, fellows, junior mentees) without creating long-term dependence is important.

20. A very capable coordinator can be the “glue” that holds together components, monitors progress, pushes and cajoles towards deadlines and lends an empathetic guiding hand where necessary. The coordinator can add significant value, keeping all moving in a similar direction and accelerating progress towards the desired results.*
21. International exposure to highly professional scientific environments is very inspiring when the scientists are still in the early stages of their research careers.

Recommendations

5

For program redesign or scaling up

1. Draw from each of the programs the best features of both

With two programs that are both overlapping and complementary, it is possible to draw from their best aspects.

- G&D Program can aid the opportunity to gain experience in a foreign laboratory, adding to the already rounded, holistically designed G&D Program. Such an attachment for two or three months would provide G&D Fellows with the key benefits received by the Borlaug Fellows. The reinforcing nature of the G&D Program components also implies that none of the existing components should be dropped.
- Borlaug Program should determine to what extent it wants to continue with, and sharpen its focus on the soft skills of scientific leadership, as it has done by including the G&D Women's Leadership and Management Course, the Mentoring Orientation Workshop and the G&D networking and information dissemination opportunities. Qualitative information clearly shows that these components (in particular the Women's Leadership and Management Course) greatly enhanced the impact of the program on the participants and added significantly to the potential that results from the program will be sustained over time.

2. Focus from the beginning on sustainability

For sustainable results, these programs are – and should be – about the empowerment of the individual. There is also a need to establish the program with a strong focus on sustaining action and results after the program has come to an end. The most obvious strategy is to work towards institutionalizing a similar program in each institution and develop innovative methods to influence the enabling environment – the institutional system within which the fellows work. This would require a thorough understanding of the social and institutional culture and of existing influences on the work of women scientists in such institutions. At the very least, the institutions' management and fellows' colleagues should be included in a strategy aimed at creating awareness and support for the initiative. Ideally, a more intensive effort should be made to ensure a nurturing environment for deserving women within each institution, either through a tailor-made strategy for each or through policy changes, strategies and programs that can affect the whole system, building on what is already being done within the institutions. In all cases, the counter-reaction of men and women not included in the program should be considered and addressed to prevent a backlash against participants.

Practical aspects can be built in, such as creating opportunities to continue engaging the fellows (and mentors) after their support and formal engagement has come to an end. They are enthusiastic and can form support networks and continue to serve as active role models at school, university and community levels. The fellows should also be sensitized about how best to influence their own institutions, given their experiences.

3. Form alliances and partnerships in funding and implementation for greater effect

Due to the resource-intensive nature of focusing on the development of individuals, form alliances and partnerships with national governments and other organizations (both nationally and internationally), where appropriate, to develop effective ways through which to reach the fellows' institutions or the larger research system. Existing policies and strategies in each institution, or the policies and strategies affecting the agricultural research system as a whole can be targeted for change where necessary.

4. Track and use, from the beginning, changes in context and performance in order to inform improvements throughout the program lifetime and beyond

Ensure from the beginning an effective monitoring and evaluation system that tracks participants' performance (such as the quality and quantity of scientific outputs and qualitative impact stories) and the contexts that affect their performance. For this purpose, participatory monitoring methods (such as Most Significant Change or Outcome Mapping) as well as Realist Evaluation that include quantitative and qualitative methods will be useful. Report on and use these on a regular basis in true adaptive management style. Expected results, as well as unintended consequences, should be included. Ingrain this approach in the culture of the program, with ownership by the participants themselves.

5. Establish a well functioning oversight and management system for accountability and good execution

Use an organizational model similar to that of the G&D Program to ensure accountability and a responsive program, including a steering committee and a local mentoring coordinator who can be both catalyst and glue for program initiatives. If the program is scaled up across Africa, for example, a cascading yet connected structure per geographic region (or per sector if the program is structured accordingly) will help prevent fragmentation and lower quality work.

6. Continue tracking and engaging fellows after their formal engagement has been terminated

Establish a tracking system that continues to follow fellows for some years after their participation in the program has expired in a continued attempt to learn about the nature of an effective intervention that yields sustained results over time. Determine to what extent they can and would be willing to remain engaged in the program as occasional advisors, support networks or mentors.

7. Be aware of and plan for the challenges in scaling up

This type of program requires empathetic and hands-on management, and attention to detail. There are many relatively minor aspects that might derail the effort if not well designed and implemented. An example is the careful definition and consistent application of i) the criteria for selection of the target groups – fellows and mentors – as well as ii) an incentive system (where appropriate) to ensure that only women with real merit receive the benefits and that a sense of entitlement among the broader group of women is avoided. Many of the lessons learned should be carefully considered when scaling up.

For incremental program improvements

8. Use the evaluation findings and lessons as well as stakeholder wisdom to inform incremental change

Use a process of stakeholder engagement to draw on the evaluation findings and lessons to determine what can be done to improve the program design and implementation for a next phase. The Borlaug Program should pay particular attention to:

- clarifying the program goals and components so that there is a shared vision among donors, managers and implementers, and participants,
- ensuring professional, systematic preparation before fellows come to the US in order to match fellows and mentors scientifically as far as possible, and to make clear and manage expectations,
- drawing from past experiences and including alumni opinion on how to structure the period in the US to make best use of the opportunity, given the specific character of the target group (which is somewhat different to that of the other Borlaug Fellowship Programs),
- determining how best to include effective soft skills training for enhanced and sustained results – especially if the program is to focus on scientific leadership and not just on exposing women scientists to US laboratories – as pathways to agricultural productivity depend not only on scientific knowledge but on the profile, opportunities and confidence of the women scientists in the long term,
- designing and supporting follow-up actions that can improve results and enhance sustainability after the fellows' visit to the US – for example providing a fund for competitive grants aimed at catalyzing collaboration between the fellows and US mentors or their institutions,
- establishing a monitoring and reporting system that facilitates tracking of progress, accountability, learning among program stakeholders, an adaptive management approach and a focus on results.

Terms of Reference

The United States Agency for International Development (USAID) has availed funds to the Gender & Diversity Program (G&D) of the Consultative Group on International Agricultural Research (CGIAR) for an evaluation of the activities it has supported under two fellowship programs geared towards enhancing the science capacity and leadership skills of African women agricultural scientists.

USAID has provided funding since September 2005 to support the Africa Women in Science (WIS) component of USDA's Norman E. Borlaug International Agricultural Science and Technology Fellows Program. This component pairs African women agricultural scientists with Mentors at US universities for a period of about four to six weeks to conduct collaborative research on a topic of mutual interest. These funds were designated by USAID to support 35 Africa WIS Borlaug fellowships. A follow up visit by the Mentor to the fellow's home country is also part of the standard Borlaug fellowship, but has not been part of the WIS program to date. In addition, at USAID's request, G&D's women's leadership and management course and G&D's electronic networking have been added to this component of the Borlaug Fellows program. Since 2005 a total of fifteen of the proposed 35 Africa WIS Borlaug Fellows have participated in some aspect of the WIS fellowship program. Detailed information about the WIS component and the complete Borlaug fellowship program is available at: <http://www.fas.usda.gov/icd/borlaug/borlaug.htm>.

With support from the Rockefeller Foundation and the Syngenta Foundation for Sustainable Agriculture, G&D in 2005 launched a pilot fellowship program (G&D-Rockefeller Fellowship Program) to enhance the careers of East African women crop scientists from the Kenyan, Tanzanian and Ugandan NARS providing formal mentoring by a senior scientist as well as leadership and negotiations training and electronic networking with women in science worldwide. The funds also allow the fellows to attend two international science conferences during their two year fellowship program and to practice their leadership skills by mentoring a junior woman scientist from within or outside their own institution during their second year, thus expanding the benefits of the program to more individuals and including more institutions. More information on the program is available at: http://www.genderdiversity.cgiar.org/resource/women_fellowships.asp.

USAID, USDA, the Rockefeller Foundation, the Syngenta Foundation and G&D are interested in identifying:

- the strengths and weaknesses of the two types of fellowships
- the value of various elements of the fellowship experience to fostering improved scientific research and to developing agricultural leaders
- their respective impacts at various levels (fellow, mentor, junior mentee, fellow's

institution, mentor's institution, junior mentee's institution, donor, implementing agency, CGIAR

The pathways through which these types of programs potentially contribute to increased agricultural productivity in Africa.

In order to design effective and efficient interventions of this nature in the future, we need to understand,

- which elements work best,
- which do not work and why;
- what is the relative return to investments made.

Competencies and experience required

An expert in evaluation of capacity building interventions with substantial experience in this field, part of which should be gained in Africa is required for this assignment. The ideal candidate is familiar with using evaluation tools such as electronic / web based surveys, telephone as well as personal interviews and needs to be well versed in statistical tools. A good understanding of gender and leadership issues, particularly with reference to African women scientists and the institutions they work in is essential. Experience in evaluating the effectiveness of capacity / leadership development programs is vital.

Specific Terms of Reference – scope of work

The short term consultant is expected to:

1. Review available documentation on both fellowship components (application and selection procedures, website contents, reports, survey results, impact stories of fellows/junior mentees, country meeting notes and evaluations of training events, public relations events, see Annex for a list of documentation available)
2. In consultation with G&D develop a methodology allowing comparative evaluation of the two programs administered to fellows, mentors, junior mentees and other relevant individuals,
3. Use the agreed tools to assess strengths and weaknesses of the two types of fellowships by evaluating the various components with regard to their intended contribution to the objectives of the programs. For the Borlaug WIS fellowship the key components are the collaborative research with the Mentors, the follow-up visit by the Mentor and the G&D leadership training component. The follow up visit of Mentors in the fellows' home countries has not taken place to date. However, the first group of Borlaug fellows participated in the G&D Mentoring orientation workshop in July 2006. In addition, a new element, not yet operational, has been added to the Borlaug WIS program that will make small competitive grants available to Borlaug WIS fellows for travel to a meeting to present research work or for small research projects. For the G&D-Rockefeller Fellowship Program, the components are summarized below:
 - a two-year mentoring relationship with a senior scientist in the fellow's field, plus funds to present her research at a major scientific conference each year;

- participation in the CGIAR's women's leadership and negotiations training;
- linkages to regional and global networks of women scientists and researchers; and
- active mentoring of a junior woman scientist during the second year of the fellowship.

Particularly focus on:

- the potential impacts of the two types of fellowships at the level of fellow, mentor, junior mentee, potentially other women in science, fellow's/mentor's/junior mentee's institution, donor, implementing agency, CGIAR by specifically looking at:
 - Scientific expertise and growth
 - Personal leadership/visibility and career development
 - Institutional learning and development – influence on mentors and institutions involved
 - Constraints encountered and lessons learnt.

The core questions regarding the evaluation of the two fellowship programs' components are:

- Which interventions work best?
- Which do not work?
- Which work, but do not provide a reasonable return to investment?
- What are the reasons for success/failure?
- What is a justifiable financial investment for those working well within a future similar program?
- For USAID, the ultimate goal of investing in women in agricultural science is increasing agricultural productivity in sub-Saharan Africa. Is there any indication that the two programs have contributed to this goal?

The consultant will work under the supervision of the G&D Program Leader, but in close collaboration with USAID, USDA and the Rockefeller Foundation's Nairobi Office.

Timeframe

The estimated input will be 30 days including reporting time. This consultancy should be finalized by end of September 2007.

Reporting requirements

The consultant will submit a draft report not later than 3 weeks after finalizing field/survey work and a final report not later than 2 weeks after receiving comments from the G&D Program Leader, USAID, USDA, the Rockefeller Foundation and the Syngenta Foundation. The report will cover the methodology applied, evaluation results and recommendations for improving future fellowship programs and their tools/modules.

Additional G&D activities:

G&D is also preparing for an international conference on "*Repairing the Leaking Pipeline of Women Agricultural Scientists in Africa*" to be held end of October 2007 at

the Rockefeller Foundation's Bellagio Conference Center. The aim of this conference bringing together representatives of the most important women in science programs worldwide is to strategize new opportunities to enable women scientists to achieve their fullest potential in research, and to advance in their careers. The emphasis is on women scientists in developing countries, and especially women agricultural scientists on the African continent. The main objectives of this conference are:

1. To generate a better understanding of proven success factors for enhancing the careers of women in science that would be widely shared and disseminated to national and international research institutes worldwide, especially in Africa.
2. To identify the most promising activities and mechanisms of funding to expand supports for career development of Africa's women agricultural scientists.
3. To strengthen women and science programs worldwide through mutual learning and exchange of experience, with a focus on 'what works' to keep women scientists in the pipeline.

Representative case studies of the main women in science programs all over the world and a documentary film will be prepared to support achievement of these objectives. The intention is to use the results of the comparative evaluation of the two fellowship programs when preparing for this.

Programs at a Glance

THE PROGRAM AT A GLANCE

	G&D Fellowship Program	Borlaug WIS Program
Program status	Three year proof of concept, based on CGIAR G&D experience with leadership and management training program Since 2005 2 rounds completed Terminating in 2008. Applied for funding for scaling up of program based on lessons learnt.	Proof of concept. Extension of Norman E Borlaug Fellows Program, experiences from USAID and USDA; aligned with Presidential Initiative to End Hunger in Africa (IEHA) Since 2005 3 rounds completed; 4th round under way Central funding ending in 2008. In line with national decentralization policies, further funding to be solicited from country missions.
Program period	Fellow support for two years, over three year period mid 2005-2008	Fellow support spread over less than a year, over three year period 2005-2008
Target groups	Researchers from NARIs, universities as well as budding entrepreneurs; age no restriction.	Researchers, policymakers, university faculty in the early to mid stage of their careers
Minimum qualifications	Masters degree; majority have doctoral degrees; generally more senior than Borlaug in age, qualifications and position	Masters degree with 3 years practical experience or working towards Masters degree with 5 years practical experience
Fellows' countries	Kenya, Uganda, Tanzania	Ghana, Kenya, Mali, Nigeria, Uganda, Zambia, Malawi, Mozambique, Niger (last three to be included at a later stage)
Mentors' countries	Kenya, Uganda, Tanzania, South Africa, India	USA
Specialist fields	Crop sciences	Agriculture, forestry, natural resources
Funding	Rockefeller, Syngenta Foundations, SDC for specific contributions	USAID, USDA, in-kind from Universities of Florida, Pennsylvania State (Rounds 1-3)
Number of participants	22 Fellows; 21 Junior Mentees	49 Fellows (envisaged over the total period; 19 have participated to date)
Included in the evaluation	Fellows Rounds 1 and 2	Fellows Rounds 1-3
Management and organizational relationships	CGIAR G&D Team, supported by a Steering Committee and Mentoring Coordinator Steering Committee includes donors, G&D representatives	Managed by USDA Foreign Agricultural Services (FAS), supported by US University International Offices, Forum for Agricultural Research in Africa (FARA) and the CGIAR G&D Office for the Leadership and Management Course component.
Partner institutions	No official implementing partners	University of Florida, Pennsylvania State University, University of Wisconsin (the latter will be active in upcoming rounds)
Selection process	Criteria Open announcement in media and distribution lists Shortlist by G&D Steering Committee using ratings	Criteria Open announcement in media and distribution lists Shortlist by FARA, an African NGO Telephonic interviews from US
Incentives for Mentoring	Self-selection and self-motivation among Mentors prepared to participate, with encouragement from the G&D staff in response to Fellows' identification of potential Mentors Feature stories in G&D News; Certificate from G&D/Rockefeller acknowledging their investment in African women scientists	Self-selection and self-motivation among Mentors prepared to participate, with encouragement from the host university and Borlaug Program staff in response to Fellows' identification of potential Mentors based on their areas of interest Salary support to departments for time release of Mentors

Program Goals, Expected Results And Impact

Program goals	<ul style="list-style-type: none"> Aimed at increasing women scientists' skills, visibility and contributions to science and development, including Enhanced scientific expertise through mentoring and presentation at scientific conferences Development of team management and leadership skills through participation in leadership and negotiations training Improved access to knowledge and support via linkages to regional and global networks of women scientists and researchers Opportunities to practice new skills via Mentoring junior women scientists Contribute to broader institutional learning about the contributions and constraints of women scientists in the fight against hunger, poverty and environmental degradation in Africa 	<ul style="list-style-type: none"> Provide female agricultural research scientists, faculty and policymakers with an opportunity to work one-on-one with US experts in the fields of agriculture, forestry and natural resources at a US institution or CGIAR centre Provide scientists, faculty and policymakers with practical experience and exposure to new technologies that can enhance their own research endeavours; Foster increased collaboration and networking between African and U.S. agricultural scientists and policymakers to improve agricultural productivity Facilitate the transfer of new science and agricultural technologies to strengthen agricultural practices Address obstacles to the adoption of technology such as ineffectual policies and regulations Provide leadership skills training
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Expected outcomes and impact	<p>Fellows:</p> <ul style="list-style-type: none"> • Demonstrate improved skills regarding their own effectiveness in carrying out challenging research projects, sustaining team performance and publishing results in refereed journals • Enhanced expertise to build strategic alliances in their institutions, manage conflict and to be successful negotiators for institutional change • Professional visibility and recognition improved via professional knowledge sharing and a feedback culture. <p>Mentors:</p> <ul style="list-style-type: none"> • Insights into the specific needs of African women scientists, assessed potential for leadership among fellows and applied lessons learnt in their institutions as well as their own work environment. • Chance to enhance their professional networks, publish jointly with mentees, and increase their competence in providing a women-friendly work environment <p>Institutions:</p> <ul style="list-style-type: none"> • NARI – profit from increased staff effectiveness and staff morale as well as from an increased pool of potential leaders with valued management and leadership skills • Positive impact on the return to investment into research, benefiting poor and marginalized African farmers <p>CGIAR:</p> <ul style="list-style-type: none"> • Gain from an increased exposure to African women scientists' perspectives, knowledge, interest and talent, which will improve partnerships between CGIAR centres and NARIs <p>All stakeholders:</p> <ul style="list-style-type: none"> • Learn from African women what they need to make their voices heard and to effect changes in their lives and within their institutions <p>G&D:</p> <ul style="list-style-type: none"> • New ideas on how to improve the offered courses in women's leadership and negotiation skills and the Mentoring Program. <p>Donors:</p> <ul style="list-style-type: none"> • Lessons how better to prepare women scientists for effective and efficient use of the scientific gains for the benefit of African farmers. 	Not made available to the evaluator.
Program Components		
Purpose: Soft skills transfer	Mentoring orientation workshop	Mentoring orientation workshop (round 1) On-site orientation max half day.
Purpose: Soft/hard skills transfer	Two year structured Mentorship in own country by senior scientist	4-6 week unstructured Mentorship in USA by senior scientist; possibly return visit by US Mentor (round 4; depending on funding)
Purpose: Soft skills transfer	G&D leadership and management course	G&D leadership and management course before or after Mentoring
Purpose: Soft skills transfer	Negotiating skills for women course (for all Fellows, later on in period)	-
Purpose: Soft/hard skills transfer	Mentoring of junior mentee	-
Purpose: Enhancing profile and exposure	International conference attendance	US university experience Off-site visits International conference attendance grant (added in 2007)
Purpose: Information and access to opportunities	G&D communication and resources	G&D communication and resources Small fund for textbooks, computer programs
Purpose: Professional and support networks	Mentor Fellows of both programs G&D global network	Mentor Fellows of both programs G&D global network
Monitoring, Accountability And Learning		
	<ul style="list-style-type: none"> • Well defined reporting cycle, feedback surveys • Monitoring of content and approaches • Informal meetings of Mentors and Mentees in one geographical area • Steering Committee meets twice a year to monitor progress based on monitoring surveys, and provide guidance ;frequent interaction also by phone and email. • Fellows: Brief biannual reports on progress as well as perceived changes and challenges. • Annual reports to donors by G&D, documenting successes, challenges and lessons learnt • Final report from G&D to Rockefeller three months after program end. 	<ul style="list-style-type: none"> • Quarterly reporting USDA to USAID • Feedback sessions and surveys of Fellows and Mentors • University reports to USDA • G&D reports and impact stories to USDA/USAID

Reference Documents

Not all resources consulted are provided in this list. Much of the background information was drawn from various Web sites such as:

<http://www.fas.usda.gov/icd/borlaug/borlaug.htm>

<http://www.genderdiversity.cgiar.org/>

http://www.genderdiversity.cgiar.org/resource/women_fellowships.asp

www.Mentornet.net

A number of relevant articles were studied yet not listed in the text. These included

Ray Pawson (2004). *Mentoring relationships: an explanatory review*. ESRC UK Centre for Evidence Based Policy and Practice Working Paper 21.

Carol B Muller, MentorNet (2002). *The under-representation of women in engineering and related sciences: pursuing two complementary paths to parity*. Retrieved on 1 October 2007 from www.Mentornet.net.

In addition, the following were made available by the two programs. Note: Limited documentation was received w.r.t. the Borlaug Program:

Proposals/Agreements:

Proposal to the Rockefeller Foundation, April 2005

Letter of Agreement from the Rockefeller Foundation, April 2005

Proposal to the Syngenta Foundation, April 2006

Letter of Agreement from the Syngenta Foundation, September 2006

Proposal to the Rockefeller Foundation's Bellagio Conference Center, July 2006

Progress and Financial Reports:

Year One Progress and Financial Report to the Rockefeller Foundation (May 2006)

First Progress Report on the Mentoring Program for Women Scientists in East Africa: June to December 2005; by Julia Gitobu

Second Progress Report on the Mentoring Program for Women Scientists in East Africa: January to April, 2006; by Julia Gitobu

Third Progress Report on the Mentoring Program for Women Scientists in East Africa: May to November, 2006; by Julia Gitobu (including report on feedback by fellows on participation in scientific conferences)

Evaluations from Group 1 (7 Fellows) Borlaug Africa Women in Science Fellows, October, 2005

Final Report for Group 1- University of Florida, Jan. 2006

Evaluations from Group 2 – (8 Fellows) Borlaug Africa WIS Fellows, November, 2006

Final Report for Group 2 – University of Florida, Jan. 2007

Steering Committee Meeting Reports (for G&D/Rockefeller fellowship program):

Minutes of the 1st Steering Committee Meeting -June 24, 2005, ICRAF House, Nairobi

Mentoring Orientation Workshop Reports:

Report on the G&D Mentoring Orientation Workshop for CGIAR scientists, World Agroforestry Center, Nairobi – Kenya (participation of some NARS women scientists to test usefulness of Mentoring material), February 2005; by Julia Gitobu

Report on the first (2005) G&D Mentoring Orientation Workshop for women scientists in East Africa, World Agroforestry Center, Nairobi – Kenya 11th-13th July 2005; by Julia Gitobu

Report on the second (2006) G&D Mentoring Orientation Workshop to Enhance the Careers of Women Scientists in Africa (with participation of Borlaug fellows and Mentors as well as G&D/Rockefeller fellows, Mentors and junior mentees) at Severin Sea Lodge, Mombasa, Kenya 3rd-7th July 2006; by Julia Gitobu

Impact Stories:

Impact Stories of Group 1 Fellows (July 2005-Feb 2006)

Impact Stories of Group 1 Junior Mentees (July-Nov 2006)

Impact Stories of Group 1 Fellows (March-Nov 2006)

Impact Stories of Group 1 Borlaug Fellows (Nov 2006)

Leadership Course Reports:

Course evaluation of women's leadership course held at ILRI, Addis Ababa, Ethiopia, October 2005, brief report

Course evaluation of women's leadership course held at CIP, Lima, Peru, May 2006, brief report

Report on Women's Leadership & Management Course (CIP, Peru); Submitted to USAID and USDA, based on feedback from Group 1 Borlaug Fellows, 7th-13th May 2006

Course evaluation of women's leadership course held at IITA, Ibadan, Nigeria, October 2006, brief report

Persons Interviewed

NAME	POSITION	ORGANISATION	CITY	COUNTRY
BORLAUG WIS PROGRAM DONORS, MANAGERS AND COORDINATORS				
Meredith Soule	Research Advisor	USAID/EGAT/ESP/IRB	Washington	USA
John Thomas	Director, EGAT/AG	USAID	Washington	USA
Natasha Acheampong	Research & Exchanges Management Specialist	USDA/FAS/OCBD/TSED	Washington	US
Gloria Effilfie	Special Assistant to the Executive Director	Forum for Agricultural Research in Africa (FARA)	Accra	Ghana
Anna Ferus	International Trade Specialist, Office of Country and Regional Affairs (OCRA)	Foreign Agricultural Service (FAS), USDA	Washington	USA
Karen Uetrecht	Program Manager, USDA/USAID Borlaug WIS Program	Foreign Agriculture Service, OCBD/TSED	Washington	USA
David Sammons	Director, International Programs, Institute of Food and Agricultural Sciences	University of Florida	Gainesville	USA
Lisette Staal	Research Coordinator, UF Water Institute	University of Florida	Gainesville	USA
Deanne Behring		Pennsylvania State University	State College	USA
Melanie Gilbert	Agriculture International Programs	Pennsylvania State University	State College	USA
ROCKEFELLER WIS PROGRAM DONORS, MANAGERS AND COORDINATORS				
Peter Matlon	Managing Director	The Rockefeller Foundation	Nairobi	Kenya
Therese St Peter	Head, Programs and Partnerships – North America	Syngenta Foundation	Research Triangle Park	USA
Amelia Goh	CGIAR Gender & Diversity Program	Host: ICRAF	Nairobi	Kenya
Helge Recke	CGIAR Gender & Diversity Program	Host: ICRAF	Nairobi	Kenya
Vicki Wilde	Program Leader, CGIAR Gender & Diversity Program	Host: ICRAF	Nairobi	Kenya
G&D PROGRAM STEERING COMMITTEE				
Agnes Mwang'ombe	Principal, College of Agriculture and Veterinary Sciences	University of Nairobi	Nairobi	Kenya
Therese St Peter	Head, Programs and Partnerships (North America)	Syngenta Foundation	Research Triangle Park	USA
Vicki Wilde	Program Leader, CGIAR Gender & Diversity Program	Host: World Agroforestry Centre (ICRAF)	Nairobi	Kenya
BORLAUG PROGRAM MENTORS GROUP 1				
Sabine Grunwald	GIS Research Laboratory, Institute of Food and Agriculture Services (IFAS)	University of Florida (UFL)	Gainesville	USA
Jane Polston	Professor, Institute of Food and Agriculture Services (IFAS)	University of Florida (UFL)	Gainesville	USA
Eric Simonne	Professor, Institute of Food and Agriculture Services (IFAS)	University of Florida (UFL)	Gainesville	USA
BORLAUG PROGRAM MENTORS GROUP 2				
Jane Polston	Professor, Department of Plant Pathology, University of Florida	University of Florida (UFL)	Gainesville	USA
Gary E. Rodrick	Professor, Food science & Human Nutrition Department, University of Florida	University of Florida (UFL)	Gainesville	USA
James A. Sterns	Associate Professor, Food and Resource Economic Department, University of Florida	University of Florida (UFL)	Gainesville	USA
Glenda Warren	Associate Professor, Department of Family, Youth and Community Sciences	University of Florida (UFL)	Gainesville	USA
BORLAUG PROGRAM MENTORS GROUP 3				
Dawn Luthe	Professor, Department of Soil Science, Pennsylvania State University	Pennsylvania State University (PSU)	State College	USA
Jim Hamlett	Associate Professor, Agricultural Engineering	Pennsylvania State University (PSU)	State College	USA

NAME	POSITION	ORGANISATION	CITY	COUNTRY
G&D PROGRAM MENTORS GROUP 1				
Richard Jones	Assistant Director, Eastern and Southern Africa	ICRISAT	Nairobi	Kenya
Margaret Mangheni	Senior Lecturer, Agricultural Extension	Makarere University	Kampala	Uganda
Agnes Mwang'ombe	Principal, College of Agriculture and Veterinary Sciences	University of Nairobi	Nairobi	Kenya
Helga Recke	Consultant, CGIAR G&D Program	ICRAF	Nairobi	Kenya
G&D PROGRAM MENTORS GROUP 2				
Clive Drew	Uganda Agricultural Productivity Enhancement Program (APEP)		Kampala	Uganda
Jean Hanson	Project Leader, Forage Diversity Project	International Livestock Research Institute (ILRI)	Addis Ababa	Ethiopia
Richard Jones	Assistant Director, Eastern and Southern Africa	ICRISAT	Nairobi	Kenya
Edward Kanju	Cassava Breeder and Senior Researcher	International Institute of Tropical Agriculture (IITA)	Dar es Salaam	Tanzania
Amelia K Kivaisi	Professor, Applied Microbiology Unit	University of Dar es Salaam	Dar es Salaam	Tanzania
Jan Low	Regional Leader Sub-Saharan Africa	International Potato Center (CIP)	Nairobi	Kenya
Lennah Nakhone	Director, Crop Management, Research & Training (CMRT)	Egerton University	Nakuru	Kenya
BORLAUG PROGRAM FELLOWS GROUP 1				
Patience Asem	Research Fellow, Department of Agricultural Extension	University of Ghana	Accra	Ghana
Morufat Balogun	Senior Research Fellow (Plant Breeding)	Institute of Agricultural Research and Training	Ibadan	Nigeria
Fatou Diop	Researcher (Plant Breeding), Institute of Agricultural Research	Ministry of Agriculture	Dakar	Senegal
Nomé Sakané	Research Assistant (Agronomy)	Africa Rice Centre – WARDA – Sahel	Dakar	Senegal
BORLAUG PROGRAM FELLOWS GROUP 2				
Olanike Adeyemo	Lecturer	University of Ibadan	Ibadan	Nigeria
Susan Keino	Tutorial Fellow	Maseno University	Maseno	Kenya
Ruth Mbabazi	Fisheries Inspector	Ministry of Agriculture, Animal and Fisheries	Kampala	Uganda
Simisola Odeyinka	Senior Lecturer	Obafemi Awolowo University	Ile-Ife	Nigeria
BORLAUG PROGRAM FELLOWS GROUP 3				
Subuola Fosoyiro	Research fellow	Institute of Agricultural Research and Training	Ibadan	Nigeria
Elizabeth Kizito	Research Officer	Med Biotech Laboratories	Kampala	Uganda
Stella Maris Sendagi	Assistant Lecturer	Makerere University	Kampala	Uganda
G&D PROGRAM FELLOWS GROUP 1				
Virginia Gichuru	PhD Student	Makerere University	Kampala	Uganda
Wariara Kariuki	Senior Lecturer, Horticulture	Jomo Kenyatta University of Agriculture and Technology	Nairobi	Kenya
Miriam Kinyua	Chief Plant Breeder and Centre Director, Njoro	Kenya Agricultural Research Institute (KARI)	Njoro	Kenya
Kallunde Sibuga	Professor	Sokoine University of Agriculture	Morogoro	Tanzania
G&D PROGRAM FELLOWS GROUP 2				
Linnet Gohole	Lecturer	Moi University	Eldoret	Kenya
Agnes Nyomora	Lecturer	University of Dar es Salaam	Dar es Salaam	Tanzania
Margaret Mulaa	Senior Principal Research Scientist	Kenya Agricultural Research Institute (KARI)	Kitale	Kenya
Charity Mutegi	Research Officer	Kenya Agricultural Research Institute (KARI)	Nairobi	Kenya
Josephine Okot	Managing Director and Proprietor	Victoria Seeds Ltd	Kampala	Uganda
Lusike Wasilwa	Program Officer	Kenya Agricultural Research Institute (KARI)	Nairobi	Kenya

Evaluation Instruments

Surveys: Fellows Master Questionnaire

PLEASE COMPLETE ALL QUESTIONS IN THIS QUESTIONNAIRE BY PLACING AN X NEXT TO THE APPROPRIATE OPTION

WHERE NECESSARY, PLEASE ALSO ADD YOUR COMMENTS IN THE SPACES PROVIDED

1. PROFILE

Note that for the sake of confidentiality the questionnaire is to be completed anonymously. We require the following information only in order to conceptualise your responses

1. In which round of this program did you participate?

- ☐ 2005 Borlaug Group 1 visiting University of Florida
- ☐ 2006 Borlaug Group 2 visiting University of Florida
- ☐ 2007 Borlaug Group 3 visiting Penn. State University
- ☐ G&D Rockefeller Round 1, 2005 Fellowship Winners
- ☐ G&D Rockefeller Round 2, 2006 Fellowship Winners

2. What is the highest qualification that you hold at present? (Select only 1 option)

- ☐ Bachelors Degree
- ☐ Honors Degree
- ☐ Masters Degree
- ☐ Doctoral Degree
- ☐ Other please specify:

3. Which of the following best describes the organization in which you work? (Select only 1 option)

- ☐ University
- ☐ Public research organization / institute
- ☐ Private sector organization
- ☐ NGO
- ☐ Government Department / Ministry
- ☐ Other please specify:

4. Which of the following best describes your position in your organization?

- ☐ Managing Director or Executive
- ☐ Principal Scientist or Research Officer
- ☐ Senior Scientist or Research Officer
- ☐ Scientist or Research Officer
- ☐ Professor
- ☐ Associate Professor
- ☐ Senior Lecturer
- ☐ Lecturer
- ☐ Assistant Lecturer
- ☐ Postdoctoral Fellow
- ☐ PhD Student
- ☐ Masters Student
- ☐ Other (please specify):

5. For how long have you been in this position (in current or past organizations)?

- | | |
|--------------------------|--------------------|
| <input type="checkbox"/> | Less than 1 year |
| <input type="checkbox"/> | 1 – 2 years |
| <input type="checkbox"/> | 3 – 5 years |
| <input type="checkbox"/> | 6 – 10 years |
| <input type="checkbox"/> | More than 10 years |

6. For how long have you worked in your present organization?

- | | |
|--------------------------|--------------------|
| <input type="checkbox"/> | Less than 1 year |
| <input type="checkbox"/> | 1 – 2 years |
| <input type="checkbox"/> | 3 – 5 years |
| <input type="checkbox"/> | 6 – 10 years |
| <input type="checkbox"/> | More than 10 years |

7. Which of the following describes your relationship with your Mentor (Select all that apply)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | I am studying and my Mentor is also my supervisor or co-supervisor |
| <input type="checkbox"/> | I am studying and my Mentor is a different person to my supervisor or co-supervisor |
| <input type="checkbox"/> | I am working and my Mentor is also my direct supervisor |
| <input type="checkbox"/> | I am working and my Mentor is a different person to my direct supervisor |
| <input type="checkbox"/> | None of the above |

2. PROFILE - Additional information

The following personal questions are not compulsory, but your responses will be very valuable and appreciated to understand better the personal circumstances of the participants.

1. In which country do you work and live?

- | | | | |
|--------------------------|--------------|--------------------------|----------|
| <input type="checkbox"/> | Burkina Faso | <input type="checkbox"/> | Nigeria |
| <input type="checkbox"/> | Cameroon | <input type="checkbox"/> | Senegal |
| <input type="checkbox"/> | Ethiopia | <input type="checkbox"/> | Tanzania |
| <input type="checkbox"/> | Ghana | <input type="checkbox"/> | Uganda |
| <input type="checkbox"/> | India | <input type="checkbox"/> | USA |
| <input type="checkbox"/> | Kenya | <input type="checkbox"/> | Zambia |
| <input type="checkbox"/> | Mali | <input type="checkbox"/> | OTHER |

2. How old are you?

- | | |
|--------------------------|--------------------|
| <input type="checkbox"/> | 20 – 25 years |
| <input type="checkbox"/> | 26 – 30 years |
| <input type="checkbox"/> | 31 – 35 years |
| <input type="checkbox"/> | 36 – 40 years |
| <input type="checkbox"/> | 41 – 45 years |
| <input type="checkbox"/> | 46 – 50 years |
| <input type="checkbox"/> | 51 – 55 years |
| <input type="checkbox"/> | 56 years and older |

3. Which of the following best describes your family status?

- | | |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | Single |
| <input type="checkbox"/> | Married / living with partner |

4. Do you have children?

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Yes – All or some of whom are still young and stay at home |
| <input type="checkbox"/> | Yes – All of whom have left the home |
| <input type="checkbox"/> | No |

5. Do you carry a direct responsibility for caring for other persons?

(You may select more than one option)

<input type="checkbox"/>	Yes – One or more of my parents or grandparents are completely or partially dependent on me
<input type="checkbox"/>	Yes – Some or all of my grandchildren are completely or partially dependent on me
<input type="checkbox"/>	Yes – Some other family members or friends are completely or partially dependent on me
<input type="checkbox"/>	No

3. RATE THE PROGRAM

This section gives us your opinion of the program. Please review the following comments and tick the most appropriate one. Please be quite critical, as we need to understand exactly the major changes, if any, brought about by your participation in the program.

1. Tell us to what extent you agree / disagree with the statements about the program:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Not sure / Not applicable
The program has been very well designed to make a real difference to our leadership abilities. It does not need to change in this respect.						
The program has been very well designed to make a real difference to our scientific and technical abilities. It does not need to change in this respect.						
The program has been very well designed to ensure that the benefits we gained will continue well after it has come to an end.						
The program provided/is providing just the kind of support that we as women who want to be leaders in science in Africa would require						
All implementation processes have been very well managed, enabling us to make the best use of available opportunities						
The program has been very well geared to help us overcome the social and cultural constraints faced by women working in science in Africa						
The program has been very well geared to be of benefit to my institution						
I apply what I have learned through the program every day in my work						

2. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "Strongly disagree" or "Disagree" to any of the questions above.

3. Tell us to what degree the program contributed – if at all – towards the enhancement of your skills, knowledge, values and attitudes. Be critical and only mention changes if you are able to substantiate claims of change with actual evidence

My participation in the program has:

	No change observed	Very limited change observed	Some change observed	Moderate change observed	Great change observed	Not sure/Not applicable
Given me a clearer vision of what I want to be and do in my profession						
Strengthened my professional leadership skills						
Increased my confidence in dealing with difficult situations at work						
Improved my skills to deal with difficult situations at work						
Increased my ability to guide and Mentor others						
Helped me to overcome some of the main constraints posed by my work environment						
Improved my ability to carry out my research projects						
Lead to my institution giving me more support and recognition for my performance or abilities						

4. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "No change observed" or "Limited change observed" to any of the questions above.

5. Tell us to what degree the program contributed towards other positive changes in your professional life. Only mention changes as a result of the program and if you are able to substantiate claims of change with actual evidence.

My participation in the program has:

	No change observed	Very limited change observed	Some change observed	Moderate change observed	Great change observed	Not sure/Not applicable
Exposed me to useful new technologies and methods						
Made it possible for me to apply, or understand how to apply, new methods or technologies to my current ongoing research						
Led or is leading to an increase in my academic outputs						
Made it possible for me to find solutions to technical or scientific problems that I would not have been able to solve before						
Increased my understanding of the situation of those at whom my research is aimed (for example farmers, rural communities)						
Helped me to identify obstacles to the adoption of new technologies and methods that can benefit agricultural productivity and food security (for example obstacles in the policy and regulatory environment)						
Helped me to become more visible among professional colleagues in my institution						
Helped me to become more visible among professional colleagues in the country						
Helped me to become more visible among professional colleagues worldwide						

6. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "No change observed" or "Limited change observed" to any of the questions above.

7. Tell us to what extent you feel the following is true.

To what extent:

	Not at all	Very limited change observed	Some change observed	Moderate change observed	Great change observed	Not sure/Not applicable
Did you experience barriers that prevented you from making use of the opportunities offered by the program?						
Has your supervisor been supportive of your participation in the Mentoring Program ?						
Has your colleagues been supportive of your participation in the Mentoring Program?						
Has your organization been recognizing you for new capacities that you have gained through the program?						
Has the program met your expectations?						

8. Please use this space to provide some insight into your ratings on the items above. Especially If you answered “Not at all”, or “To a very limited extent” to any of the questions above, please give your reasons

9. Tell us how satisfied you were with the Mentoring component of this program

How satisfied are you:

	Very dissatisfied	Dissatisfied	Neither satisfied/ Dissatisfied	Fairly satisfied	Very satisfied	Not sure/Not applicable
That the goals set for the Mentoring part of the program have been, or are being achieved?						
That your Mentor has fulfilled, or is fulfilling the role for which he/she was appointed?						
That your Mentor has understood the needs and limitations of your professional situation and environment?						
That your Mentor has been / is able to meet your need for professional growth as a (potential) women leader in science?						
With your exposure to useful technologies and techniques during the Mentoring period?						
That your Mentor has given you knowledge and ways to help you find innovative approaches and solutions in your field of work?						
That your Mentor has been accessible and supportive when needed?						
That your Mentoring period is / has been just the right length for your professional development at this stage of your career – that is, not too long or not too short						
With the professional relationship between you and your Junior Mentee?						
With the progress in working with your Junior Mentee?						

10. Please use this space to provide some insight into your ratings on the items above. Especially if you answered "Very dissatisfied", or "Dissatisfied" to any of the questions above, please give your reasons.

11. What would be the ideal period for a Mentoring Program such as this one?

<input type="checkbox"/>	6 Weeks
<input type="checkbox"/>	3 Months
<input type="checkbox"/>	6 Months
<input type="checkbox"/>	12 Months
<input type="checkbox"/>	18 Months
<input type="checkbox"/>	24 Months
<input type="checkbox"/>	36 Months
<input type="checkbox"/>	Other (please specify)

12. Why do you say so?

13. Tell us more about the program:

	Never	Seldom - Less than once a month	Occasionally – About once a month	Quite frequently – About once a week	Very frequently – About every day	Not sure/Not applicable
How frequently do you use the knowledge and skills you have gained through your participation in this program?						
How frequently do people around you comment on changes in your attitude, abilities and/or knowledge due to your participation in the program?						

14. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered “Never” or “Seldom” to any of the questions above.

15. Tell us more about the potential future effects of the program:

	No potential	Very limited potential	Some potential	Fairly good potential	Excellent potential	Not sure/Not applicable
What is the potential for this program to have a very significant positive influence on your professional development path in the medium to long term?						
What is the potential for this program to make a real difference in your ability to overcome the challenges and constraints of being a woman in science in your country?						

16. Please use this space to provide some insight into your ratings on the items above. Especially if you answered "No Potential" or "Very Limited Potential" to any of the questions above, please give your reasons

17. Please rate the program and its components in terms of the professional value of each for you:

	No value	Limited value	Some value	Moderate value	Great value	Not sure/ Not applicable
The program overall						
The preparation and orientation for the Mentorship period						
Mentorship by a senior scientist						
Mentoring a junior mentee						
CGIAR Women's leadership and management course at any of the following venues: Addis Ababa, Lima, Lagos						
CGIAR women's negotiations course at IRRI, Philippines, Ibadan						
Participation in international science conferences						
The publications and online resources to which I have gained access						
The contact established during the program with the other Fellows						
The networks of people outside the program environment with whom you now for the first time have contact						

18. Please indicate how frequently you refer to any of the following :

	Not at all	Seldom - Less than once a month	Every now and again - About once a month	Frequently - About once a week	Very frequently - About every Day	I didn't get this
G&D News						
G&D Mentoring news						
G&D Funding News						
Other Online resources made available through the program						
Database of researchers						

19. Please indicate how frequently you are sharing the program information and news resources with other colleagues in your professional networks:

	Not at all	Seldom - Less than once a month	Every now and again - About once a month	Frequently - About once a week	Very frequently - About every day	I didn't get this
G&D News						
G&D Mentoring news						
G&D Funding News						
Other Online resources made available through the program						
Database of researchers						

20. Please indicate how frequently you are in contact with the following:

	Not at all	Seldom - Less than once a month	Every now and again - About once a month	Frequently - About once a week	Very frequently - About every day	I didn't get this
My (past) Mentor(s)						
The other Fellows in my program						
My new networks in my country						
My new international networks						
My Junior Mentee (for G&D fellows)						

Junior Mentees' Master Questionnaire

PLEASE COMPLETE ALL QUESTIONS IN THIS QUESTIONNAIRE BY PLACING AN X NEXT TO THE APPROPRIATE OPTION

WHERE NECESSARY, PLEASE ALSO ADD YOUR COMMENTS IN THE SPACES PROVIDED

1. PROFILE

Note that for the sake of confidentiality the questionnaire is to be completed anonymously. We require the following information only in order to contextualise your responses.

1. What is the highest qualification that you hold at present? (Select only 1 option)

- ☐ Bachelors Degree
- ☐ Honors Degree
- ☐ Masters Degree
- ☐ Doctoral Degree
- ☐ Other please specify:

2. Which of the following best describes the organization in which you work? (Select only 1 option)

- ☐ University
- ☐ Public research organization / institute
- ☐ Private sector organization
- ☐ NGO
- ☐ Government Department / Ministry
- ☐ Other please specify:

3. Which of the following best describes your position in your organization?

- ☐ Managing Director or Executive
- ☐ Principal Scientist or Research Officer
- ☐ Senior Scientist or Research Officer
- ☐ Scientist or Research Officer
- ☐ Professor
- ☐ Associate Professor
- ☐ Senior Lecturer
- ☐ Lecturer
- ☐ Assistant Lecturer
- ☐ Postdoctoral Fellow
- ☐ PhD Student
- ☐ Masters Student
- ☐ Other (please specify):

4. For how long have you been in this position (in current or past organizations)?

- ☐ Less than 1 year
- ☐ 1 – 2 years
- ☐ 3 – 5 years
- ☐ 6 – 10 years
- ☐ More than 10 years

5. For how long have you worked in your present organization?

- ☐ Less than 1 year
- ☐ 1 – 2 years
- ☐ 3 – 5 years
- ☐ 6 – 10 years
- ☐ More than 10 years

6. Which of the following describes your relationship with your Mentor (Select all that apply)

- ☐ I am studying and my Mentor is also my supervisor or co-supervisor
- ☐ I am studying and my Mentor is a different person to my supervisor or co-supervisor
- ☐ I am working and my Mentor is also my direct supervisor
- ☐ I am working and my Mentor is a different person to my direct supervisor
- ☐ None of the above

2. PROFILE - Additional information

The following personal questions are not compulsory, but your responses will be very valuable and appreciated to understand better the personal circumstances of the participants.

1. In which country do you work and live?

- | | |
|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> Burkina Faso | <input type="checkbox"/> Nigeria |
| <input type="checkbox"/> Cameroon | <input type="checkbox"/> Senegal |
| <input type="checkbox"/> Ethiopia | <input type="checkbox"/> Tanzania |
| <input type="checkbox"/> Ghana | <input type="checkbox"/> Uganda |
| <input type="checkbox"/> India | <input type="checkbox"/> USA |
| <input type="checkbox"/> Kenya | <input type="checkbox"/> Zambia |
| <input type="checkbox"/> Mali | <input type="checkbox"/> OTHER |

2. How old are you?

- ☐ 20 – 25 years
- ☐ 26 – 30 years
- ☐ 31 – 35 years
- ☐ 36 – 40 years
- ☐ 41 – 45 years
- ☐ 46 – 50 years
- ☐ 51 – 55 years
- ☐ 56 years and older

3. Which of the following best describes your family status?

- ☐ Single
- ☐ Married / living with partner

4. Do you have children?

- ☐ Yes – All or some of whom are still young and stay at home
- ☐ Yes – All of whom have left the home
- ☐ No

**5. Do you carry a direct responsibility for caring for other persons?
(You may select more than one option)**

- ☐ Yes – One or more of my parents or grandparents are completely or partially dependent on me
- ☐ Yes – Some or all of my grandchildren are completely or partially dependent on me
- ☐ Yes – Some other family members or friends are completely or partially dependent on me
- ☐ No

3. RATE THE PROGRAM

This section gives us your opinion of the program.

Please review the following comments and tick the most appropriate one. Please be quite critical, as we need to understand exactly the major changes, if any, brought about by your participation in the program.

1. Tell us to what extent you agree / disagree with the statements about the program:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Not sure/ Not applicable
Our Mentoring activities have been very well designed to achieve their purpose. I cannot suggest any changes or additions.						
I cannot think of a better type of support at this stage of my career.						
I continue to apply the knowledge and skills I have gained through the program every day in my work.						

2. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "Strongly disagree" or "Disagree"

3. Tell us to what degree the program contributed – if at all - towards the enhancement of your skills, knowledge, values and attitudes. Be critical and only mention changes if you are able to substantiate claims of change with actual evidence.

My participation in the program has:

	No change observed	Very limited-change observed	Some change observed	Moderate change observed	Great change observed	Not Sure /Not Applicable
Given me a clearer vision of what I want to be and do in my profession						
Strengthened my professional leadership skills						
Increased my confidence in dealing with difficult situations at work						
Improved my skills to deal with difficult situations at work						
Helped me to overcome some of the main constraints posed by my work environment						
Lead to my institution giving me more support and recognition for my performance or abilities						

4. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "No Change Observed" or "Very Limited Change Observed".

5. Tell us to what degree the Mentoring Program contributed towards other positive changes in your professional life. Only mention changes as a result of the program and if you are able to substantiate claims of change with actual evidence.

My participation in the Mentoring Program has:

	No change observed	Very limited change observed	Some change observed	Moderate change observed	Great change observed	Not sure/Not applicable
Exposed me to useful new technologies and Methods						
Led or is leading to an increase in my academic outputs						
Made it possible for me to find solutions to technical or scientific problems that I would not have been able to solve before						
Helped me to become more visible among professional colleagues in the country						
Helped me to become more visible among professional colleagues worldwide						

6. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "No change observed" or "Very limited change observed".

7. Tell us more about your participation in the Mentoring Program:

	Not at all	To a very limited extent	To some extent	To a significant extent	Completely	Not sure/not applicable
To what extent are you satisfied that you are doing your best to benefit from this Mentorship?						
To what extent has your supervisor been supportive of your participation in the Mentoring Program?						
To what extent have your colleagues been supportive of your participation in the Mentoring Program?						
To what extent has your participation in this program met your expectations?						

8. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "Not at all" or "To a very limited extent".

9. Tell us how satisfied you are with the Mentoring component of this program?

How satisfied are you:

	Very dissatisfied	Dissatisfied	Neither satisfied /Dissatisfied	Fairly satisfied	Very satisfied	Not sure/Not applicable
That the Mentoring goals have been (or are being) achieved?						
That your Mentor has fulfilled, or is fulfilling the role for which he/she was appointed?						
That your Mentor has been able to meet your need for professional growth as a potential women leader in science?						
That your Mentor has been accessible and supportive when needed?						
That your Mentoring period has been just the right length - that is, not too long or not too short?						

10. Please use this space to provide some insight into your ratings on the items above. Please provide a comment especially if you answered "Very dissatisfied" or "Dissatisfied".

11. Tell us more about the Mentoring Program:

	Never	Seldom – Less than once a month	Occasionally – About once a month	Quite frequently – About once a week	Very frequently – About every day	Not sure/Not applicable
How frequently do you use the knowledge and skills you have gained through your participation in this program?						
How frequently do people around you comment on changes in your attitude, abilities and/or knowledge due to your participation in the program?						
How frequently do you have contact with your Mentor?						

12. Please rate the Mentoring Program and its components in terms of the professional value of each for you:

	No value	Limited value	Some value	Moderate value	Great value	Not sure/Not applicable
G&D Mentoring orientation workshops (2 days)						
Mentorship by a senior scientist						
The publications and online resources to which I have gained access						
The networks of people with whom I now for the first time have contact						

13. Please indicate how frequently you refer to any of the following:

	Not at all	Seldom - Less than once a month	Every now and again - About once a month	Frequently - About once a week	Very frequently - About every day	I didn't get this
G&D News						
G&D Mentoring News						
G&D Funding News						
Database of researchers						

4. COMMENTS

Please give us some of your valuable insights into the Mentoring Program.

1. How would you describe a woman scientist who is a leader? What are her characteristics and way of working?
2. What did you expect from the program when you started?
3. What are the two most positive things that have emerged from this opportunity that would otherwise not have happened?
4. What are the two most negative things that have emerged from this opportunity that would otherwise not have happened?
5. If you could do two things to improve this program, what would they be?
6. In your opinion, what are the "secrets of success" of a Mentoring Program such as this one?
7. How could this program be improved to yield more sustained, long-term positive results for you as individual and for your institution?

INTERVIEW GUIDE

Fellows

1. Do you regard yourself as a leader in your professional field?
2. If yes:
 - a. At what point did you begin to consider yourself as a leader? In other words, what convinced you that you are a leader in your field?
 - b. What are the two most important things on your career path that have helped you to become a leader?
 - c. What are the main obstacles you had to overcome?
3. If no:
 - a. What are the two most important things currently preventing you from becoming a leader?
 - b. At what stage would you feel that you have achieved such leadership? In other words, what should happen for you to feel that you are a leader in your field?
4. Why were you motivated to apply for this particular fellowship program? What attracted you to it?
5. Were your expectations met? If not, why not?
6. What do you most like about the program?
7. What would you change about the program design (in other words the components and activities) to get better results?
8. Were there any aspects related to the implementation of the program that you feel need to be improved? If so, what were they and how would you suggest that they be improved?
9. How effective has the program been in helping you to overcome any cultural constraints in being a woman in science in Africa?
10. How effective has the program been in helping you to overcome any institutional constraints? To what extent does your institutional environment support or hamper your work and progress towards becoming a leader in your professional field?
11. What are the main elements in your external environment (outside your institution) that you think will hinder your progress towards becoming a leader in your professional field? What can be done to address these?
12. Do you really think this program will help you to become a leader in your professional field, given the obstacles you are likely to face?
13. Do you think this program will help improve agricultural productivity in your field? Please motivate your answer. Can the program be adjusted to do this better?
14. What would be possible pathways to increased productivity in the sector, given the aims and activities in this program? Can it be changed to provide better potential for increased productivity in the sector?

15. Do you believe any benefits and positive effects from this program will be sustained? What indicators would you use to determine sustainability in this context? How would we know if the benefits are sustained?
16. Has the program design and implementation been done in a manner that provides the best chance for sustainability of program benefits and positive effects?
17. Are you aware of any negative effects that resulted, or might result from this program?
18. Is there anything else you would like to share with us that you feel is important for the evaluation or for the future of such fellowship programs in Africa?

INTERVIEW GUIDE

Mentors

1. How and why did you become a Mentor in the Borlaug Program? What attracted or convinced you to participate?
2. What were your expectations from the program and to what extent were they met?
3. How was the matching with your mentee done? In your opinion, how well matched were the two of you in terms of interest, understanding of each other's context, technical competency, personality, etc.?
4. How was the orientation and preparation done for the program? Did it adequately prepare you (and/or your Mentor) for what followed?
5. Were clear goals set for the Mentoring Program? Was it clear what you had to achieve?
6. How did you know what her priorities were to achieve the best results during the engagement period? To what extent were these accommodated in your collaboration?
7. Please take me through the key components of the Mentoring Program, with your own assessment of i) how significant these were towards achievement of the program goals; ii) what worked; iii) what did not; and iv) why.
8. Looking back, what would you change about the program i) design; ii) implementation? How well was the latter done? Was the university systems supportive of the program?
9. Did your mentee perform according to your expectations? If not, why?
10. How well did you and your mentee work together? What were the i) best and ii) worst parts? Has the relationship lasted beyond her presence at the university?
11. Did you understand her context and social and technical challenges and if so, how were these accommodated or addressed through the program?
12. Was the period of engagement (and aftermath) sufficient to achieve visible results

and if so, what were these? Can you point with certainty to increased outputs or achievements from the mentee, for example, as a result of the program?

13. Do you think the program will lead to increased productivity in the sector in which she works? What would be the pathways to increased productivity, given the focus of this program?
14. In your opinion, what are the key elements that would make this an i) effective; ii) not so effective (select one) intervention? What would be the “secrets of success”?
15. In your opinion, what is/has been the primary value – if any - of this program i) to you; ii) to your institution; ii) to your mentee? What changed as a result of the program?
16. What should be done to ensure that the positive benefits from the program are sustained? In your opinion, is the program geared for sustainability?
17. Anything else you want to bring to my attention for the sake of the evaluation?

INTERVIEW GUIDE

Program Designers/Managers

1. How and why did your organization initiate or get involved in this program? What attracted or convinced you that it was worthwhile?
2. What were your expectations (as organisation) from the program? To what extent have these expectations been met?
3. How was the program “theory of change” developed? On what basis was the program designed and by who, through what process? (For example, was it based on previous experience, a specific example, conceptual understanding of what brings about change, gut feeling?)
4. The program is to some extent dependent on how you define leadership in science in Africa. How have views on leadership influenced the program design and execution?
5. What were your main assumptions in the theory of change of the program?
6. You have four aims (Borlaug Program), but these imply actions rather than outcomes. What specific changes/outcomes have been envisaged through this program?
7. Who has actually been monitoring and steering the program? Has the institutional set-up worked well (for the Borlaug Program, in particular the relationship between USAID, USDA, CGIAR G&D and the participating institutions? Any issues worth noting from a management perspective?
8. How was the selection of i) universities (Borlaug); ii) fellows done, and their iii) matching with the Mentors? Looking back, is there something you would change about these processes?

9. Individual capacity building is often not adequate for sustained results given that the institutional environment in Africa very often works against women. How did you consider this in your program?
10. Furthermore, did you perceive this program in any way as helping to overcome the cultural constraints faced by women in science in Africa?
11. If you have to redesign the program, what would you change?
12. And in its implementation? What worked, what did not and why?
13. Did you adapt the program based upon lessons learnt in the first round, for example? If so, what changed?
14. How well do the accountability systems in the program work? For example, do you receive regular and useful reports, or interact with the implementers in any way?
15. Do you have any observations or reservations about the cost-effectiveness or – efficiency of this program? Are you comfortable its cost compared to the envisaged benefits? How do you “conceptualise” this issue?
16. What would make the evaluation worthwhile for your organisation? How do you expect the evaluation to be used? What are your expectations and key questions you would like to have answered?
17. What else would you like to share that you believe might be valuable to the evaluation?

INTERVIEW GUIDE

Donors

1. How and why did your organisation get involved in this program? Is this a new field of support for you?
2. Were you/your organisation engaged in any aspect of its planning? If so, could you share your key observations? For example, do you know how the planning was done, who participated and on what conceptual basis the program’s theory of change was developed?
3. Were you / your organisation engaged in any aspect of its implementation? If so, could you share your key observations?
4. How well do the accountability systems in the program work? For example, do you receive regular and useful reports, or interact with the implementers in any way?
5. From the information at your disposal, are there any observations you would like to share about how the program is unfolding?
6. What would you ideally like to be the results and impact of this program? What would make the investment worthwhile for you?
7. Did you consider the merit of supporting individual leadership capacity building compared to the need for change in institutional and social/cultural systems

around the person? Do you envisage that the program on its own can bring about the desired changes?

8. Do you have any observations or reservations about the cost-effectiveness or – efficiency of this program? Are you comfortable with cost of this program compared to the envisaged benefits? How do you “conceptualise” this?
9. Do you have any experience of similar programs, including the parallel Borlaug/G&D Program? If so, are there any observations you would like to share that can assist the evaluation?
10. What would make the evaluation worthwhile for your organisation? What are your expectations and key questions you would like to have answered?
11. How do you expect the evaluation to be used? Is there something I could do to further promote the use of the evaluation or enhance its usefulness?
12. What else would you like to share that you believe might be valuable to the evaluation at this stage?

INTERVIEW GUIDE

Administrative Coordinators at Universities (Borlaug Program)

1. How and why did your university become engaged in this program? What attracted or convinced you to participate?
2. What were your roles and responsibilities as ‘administrative coordinators’?
3. What were the expectations of the university (and your own) with respect to the program? To what extent were these expectations met?
4. How was the selection of Mentors done? How were they matched with the mentees? Looking back, is there something you would change in these processes?
5. Were clear goals set for the program, stipulating what was to be achieved? What were they? Were they made clear during the orientation of the Mentors and mentees?
6. How was the orientation and preparation of the Mentors and mentees done? Looking back, was this sufficient to prepare them for what was to follow?
7. Please take me through the key components of your work, with your own assessment of i) what worked; ii) what did not work well; and iii) why. What were your main challenges and how were they resolved?
8. Looking back, what would you change about the program – and how?
9. Did the program somehow ensure that Mentors were sensitive about the different contexts, and social and technical challenges faced by mentees?
10. To what extent did the mentees’ conduct, attitudes and performance meet your expectations?

11. In your opinion, what is/has been the primary value – if any - of this program to
i) your institution; ii) the Mentors? What, if anything, changed as a result of the
program?
12. Were there any negative effects, or unexpected consequences from the engage-
ment of the university in this program?
13. Will the university wish to be engaged in this or similar initiatives in future? Why/
why not?
14. In your opinion and from your perspective, what are the main “secrets of success”
of this program? What are the key elements that would make it effective?
15. What should be done to ensure that the positive benefits from the program are sus-
tained? In your opinion, is the program as currently designed and implemented,
geared for sustainability?

Biographical Description of Survey Participants

PROFILE OF FELLOWS

What is the highest qualification you hold at present?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
What is the highest qualification you hold at present?	Masters Degree	Count	11	2	13
		%	68.8%	16.7%	46.4%
	Doctoral Degree	Count	5	10	15
		%	31.3%	83.3%	53.6%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

Which of the following best describes the organization in which you work?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Which of the following best describes the organization in which you work?	University	Count	8	6	14
		%	50.0%	50.0%	50.0%
	Public research organization / institute	Count	5	6	11
		%	31.3%	50.0%	39.3%
	NGO	Count	1	0	1
		%	6.3%	0.0%	3.6%
	Government Department / Ministry	Count	2	0	2
		%	12.5%	0.0%	7.1%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

Organization type categorization

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Orgtype	Academic	Count	10	6	16
		%	62.5%	50.0%	57.1%
	Non-Academic	Count	6	6	12
		%	37.5%	50.0%	42.9%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

Which of the following best describes your position in your organization?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Which of the following best describes your position in your organization?	Other	Count	1	1	2
		%	6.3%	8.3%	7.1%
	Principal Scientist or Research Officer	Count	2	2	4
		%	12.5%	16.7%	14.3%
	Senior Scientist or Research Officer	Count	1	1	2
		%	6.3%	8.3%	7.1%
	Scientist or Research Officer	Count	5	1	6
		%	31.3%	8.3%	21.4%
	Associate Professor	Count	1	1	2
		%	6.3%	8.3%	7.1%
	Senior Lecturer	Count	1	1	2
		%	6.3%	8.3%	7.1%
	Lecturer	Count	2	3	5
		%	12.5%	25.0%	17.9%
	Assistant Lecturer	Count	3	0	3
		%	18.8%	0.0%	10.7%
	PhD Student	Count	0	2	2
		%	0.0%	16.7%	7.1%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

For how long have you been in this position (in current or past organizations)?

			Program		Total
			Borlaug	G&D Rockefeller	
For how long have you been in this position (in current or past organizations)?	Less than 1 year	Count	1	1	2
		%	6.3%	8.3%	7.1%
	1 – 2 years	Count	5	2	7
		%	31.3%	16.7%	25.0%
	3 – 5 years	Count	9	6	15
		%	56.3%	50.0%	53.6%
	6 – 10 years	Count	1	1	2
		%	6.3%	8.3%	7.1%
	More than 10 years	Count	0	2	2
		%	0.0%	16.7%	7.1%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

For how long have you worked in your present organization?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
For how long have you worked in your present organization?	Less than 1 year	Count	1	1	2
		%	6.3%	8.3%	7.1%
	3 – 5 years	Count	5	1	6
		%	31.3%	8.3%	21.4%
	6 – 10 years	Count	7	4	11
		%	43.8%	33.3%	39.3%
	More than 10 years	Count	3	6	9
		%	18.8%	50.0%	32.1%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

In which country do you work and live?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
In which country do you work and live?	Cameroon	Count	1	0	1
		%	6.3%	0.0%	3.6%
	Ghana	Count	2	0	2
		%	12.5%	0.0%	7.1%
	Kenya	Count	2	4	6
		%	12.5%	33.3%	21.4%
	Nigeria	Count	5	0	5
		%	31.3%	0.0%	17.9%
	Tanzania	Count	0	3	3
		%	0.0%	25.0%	10.7%
	Uganda	Count	3	5	8
		%	18.8%	41.7%	28.6%
	Zambia	Count	3	0	3
		%	18.8%	0.0%	10.7%
Total		Count	16	12	28
		%	100.0%	100.0%	100.0%

How old are you?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
How old are you?	26 – 30 years	Count	1	0	1
		%	6.3%	0.0%	3.6%
	31 – 35 years	Count	10	1	11
		%	62.5%	8.3%	39.3%
	36 – 40 years	Count	2	3	5
		%	12.5%	25.0%	17.9%
	41 – 45 years	Count	2	3	5
		%	12.5%	25.0%	17.9%
46 – 50 years	Count	1	2	3	
	%	6.3%	16.7%	10.7%	
51 – 55 years	Count	0	3	3	
	%	0.0%	25.0%	10.7%	
Total		Count	16	12	28
		%	100.0%	100.0%	100.0%

Which of the following best describes your family status?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Which of the following best describes your family status?	Single	Count	5	6	11
		%	31.3%	50.0%	39.3%
	Married / living with partner	Count	11	6	17
		%	68.8%	50.0%	60.7%
TOTAL		Count	16	12	28
		%	100.0%	100.0%	100.0%

Do you have children?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Do you have children?	Yes – All or some of who are still young and stay at home	Count	11	8	19
		%	68.8%	66.7%	67.9%
	Yes – All of whom have left the home	Count	0	2	2
		%	0.0%	16.7%	7.1%
	No	Count	5	2	7
		%	31.3%	16.7%	25.0%
Total		Count	16	12	28
		%	100.0%	100.0%	100.0%

Do you take care of anyone else?

			PROGRAM		TOTAL
			Borlaug	G&D Rockefeller	
Do you take care of anyone else?	Yes	Count	14	12	26
		%	87.5%	100.0%	92.9%
	No	Count	2	0	2
		%	12.5%	0.0%	7.1%
Total		Count	16	12	28
		%	100.0%	100.0%	100.0%

PROFILE OF JUNIOR MENTEES

What is the highest qualification that you hold at present?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors Degree	4	25.0	25.0	25.0
	Masters Degree	9	56.3	56.3	81.3
	Doctoral Degree	2	12.5	12.5	93.8
	Higher National Diploma	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Which of the following best describes your family status?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	5	31.3	31.3	31.3
	Married / living with partner	11	68.8	68.8	100.0
	Total	16	100.0	100.0	

Do you have children?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes – All or some of who are still young and stay at home	10	62.5	62.5	62.5
	Yes – All of whom have left the home	1	6.3	6.3	68.8
	No	5	31.3	31.3	100.0
	Total	16	100.0	100.0	

Do you care for someone else?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Care for someone	16	100.0	100.0	100.0

Which of the following best describes the organization in which you work?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University	5	31.3	31.3	31.3
	Public research organization / institute	6	37.5	37.5	68.8
	Private sector research organization	1	6.3	6.3	75.0
	Government Department / Ministry	3	18.8	18.8	93.8
	Intergovernmental	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Which of the following best describes your position in your organization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	1	6.3	6.3	6.3
	Principal Scientist or Research Officer	1	6.3	6.3	12.5
	Senior Scientist or Research Officer	1	6.3	6.3	18.8
	Scientist or Research Officer	5	31.3	31.3	50.0
	Lecturer	2	12.5	12.5	62.5
	Assistant Lecturer	2	12.5	12.5	75.0
	Masters Student	1	6.3	6.3	81.3
	Laboratory Technician	2	12.5	12.5	93.8
	Associate Expert	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

For how long have you been in this position (in current or past organizations)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	3	18.8	18.8	18.8
	1 – 2 years	6	37.5	37.5	56.3
	3 – 5 years	4	25.0	25.0	81.3
	6 – 10 years	2	12.5	12.5	93.8
	More than 10 years	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

For how long have you worked in your present organization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	1	6.3	6.3	6.3
	1 – 2 years	2	12.5	12.5	18.8
	3 – 5 years	3	18.8	18.8	37.5
	6 – 10 years	3	18.8	18.8	56.3
	More than 10 years	7	43.8	43.8	100.0
	Total	16	100.0	100.0	

In which country do you work and live?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Kenya	9	56.3	56.3	56.3
	Tanzania	4	25.0	25.0	81.3
	Uganda	3	18.8	18.8	100.0
	Total	16	100.0	100.0	

How old are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 – 25 years	1	6.3	6.3	6.3
	26 – 30 years	2	12.5	12.5	18.8
	31 – 35 years	4	25.0	25.0	43.8
	36 – 40 years	2	12.5	12.5	56.3
	41 – 45 years	6	37.5	37.5	93.8
	46 – 50 years	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Evolution in Outputs (2002-2008)

TYPE OF OUTPUT OR ACTIVITY: BORLAUG PROGRAM – 15 FELLOWS (79%)		Number in 2002	Number in 2003	Number in 2004	Number in 2005	Number in 2006	Number in 2007
1. FUNDING MOBILISATION	1.1 Proposals submitted	4	4	7	16	16	17
	1.2 Research grants mobilised	1	2	1	2	6	7
	1.3 Business loans/funds mobilised	1	-	-	3	1	2
2. PUBLICATIONS	2.1 In refereed journals, as only or primary author	7	5	4	3	7	15
	2.2 In refereed journals, as one of the authors	2	-	5	4	7	7
	2.3 In unrefereed publications, as only/primary author	1	-	2	1	4	1
	2.4 In unrefereed publications, as one of the authors	-	-	1	-	1	2
3. MEMBER OF FORMAL COMMITTEES, TASK TEAMS, ETC. (NB note the number only in the year when you were FIRST nominated or (RE) elected for this purpose)	3.1 In your organization	-	6	7	8	8	17
	3.2 In your own country	1	1	1	2	3	4
	3.3 In Africa	-	-	2	-	-	2
	3.4 International	1	2	1	-	-	-
4. CONFERENCE / SYMPOSIUM PRESENTATIONS	4.1 In own country	4	1	3	6	6	3
	4.2 In Africa	-	3	2	-	2	-
	4.3 Internationally	1	1		2	7	2
5. SKILLS, RESEARCH OR BUSINESS SEMINAR PRESENTATIONS	5.1 In own organization	2	1	4	10	12	6
	5.2 In own country	-	-	4	5	2	5
	5.3 In Africa	-	3	-	-	1	-
	5.4 Internationally	-	-	1	1	-	-
7. LEADING RESEARCH OR BUSINESS TEAMS	7.1 Team only in own institution	4	5	5	9	13	9
	7.2 Team members only from own country	-	1	-	-	3	3
	7.3 Team members only from Africa	-	-	-	-	-	1
	7.4 Team includes international members	1	1	1	1	1	2
8. MULTI-DISCIPLINARY OR MULTI-INSTITUTIONAL COLLABORATIVE RESEARCH PROJECTS IN WHICH YOU ARE A PARTICIPANT (not a leader - see 7)	8.1 With organization in own country	2	2	4	9	10	12
	8.2 With organizations in Africa	-	-	-	6	8	7
	8.3 With organizations elsewhere	3	2	3	3	2	3

TYPE OF OUTPUT OR ACTIVITY: G&D PROGRAM – 17 FELLOWS (77%)		Number in 2002	Number in 2003	Number in 2004	Number in 2005	Number in 2006	Number in 2007
1. FUNDING MOBILISATION	1.1 Proposals submitted	20	14	21	24	39	46
	1.2 Research grants mobilised	15	8	21	13	24	27
	1.3 Business loans/funds mobilised	1	-	1	2	2	4
2. PUBLICATIONS	2.1 In refereed journals, as only or primary author	9	8	7	7	12	19
	2.2 In refereed journals, as one of the authors	7	4	7	7	11	10
	2.3 In unrefereed publications, as only/primary author	25	9	9	16	15	19
	2.4 In unrefereed publications, as one of the authors	20	5	12	14	18	12
3. MEMBER OF FORMAL COMMITTEES, TASK TEAMS, ETC. (NB note the number only in the year when you were FIRST nominated or (RE)lected for this purpose)	3.1 In your organization	13	10	14	8	16	17
	3.2 In your own country	10	10	7	10	17	13
	3.3 In Africa	6	4	5	2	7	13
	3.4 International	2	2	1	2	4	5
4. CONFERENCE / SYMPOSIUM PRESENTATIONS	4.1 In own country	11	9	13	28	18	14
	4.2 In Africa	3	6	11	15	6	18
	4.3 Internationally	2	3	7	2	11	8
5. SKILLS, RESEARCH OR BUSINESS SEMINAR PRESENTATIONS	5.1 In own organization	35	9	7	6	20	20
	5.2 In own country	4	2	4	11	10	6
	5.3 In Africa	4	4	5	3	8	11
	5.4 Internationally	2	-	-	-	4	7
6. LEADING RESEARCH OR BUSINESS TEAMS	6.1 Team only in own institution	15	6	11	5	19	18
	6.2 Team members only from own country	8	4	4	7	8	11
	6.3 Team members only from Africa	3	1	3	5	5	8
	6.4 Team includes international members	1	2	1	2	3	5
7. MULTI-DISCIPLINARY OR MULTI-INSTITUTIONAL COLLABORATIVE RESEARCH PROJECTS IN WHICH YOU ARE A PARTICIPANT (not a leader - see 7)	7.1 With organization in own country	8	6	10	9	15	15
	7.2 With organizations in Africa	3	3	6	6	8	11
	7.3 With organizations elsewhere	4	2	1	6	9	13

The following table presents the number of respondents for each group.

Group	Number of Respondents*
Borlaug Group 1	5
Borlaug Group 2	7
Borlaug Group 3	3
G&D Group 1	7
G&D Group 2	10
Borlaug Total	15
G&D Total	17
TOTAL	32

*Note: Due to the small number of persons involved the data in the table and graphs should not to be interpreted in isolation of the relevant qualitative information.

FIGURE 22 Grant Mobilization

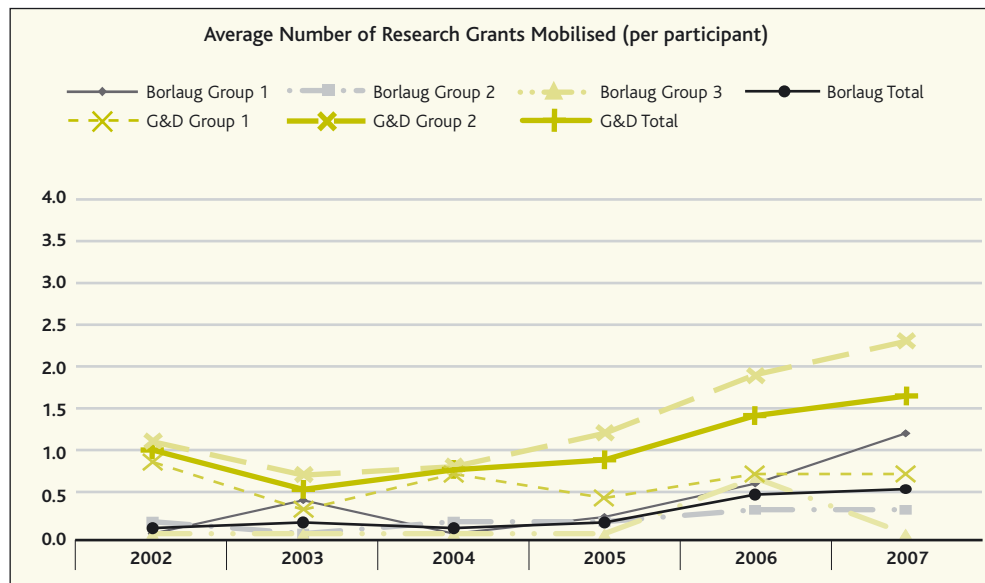


FIGURE 23 Publications



FIGURE 24 Committee Participation

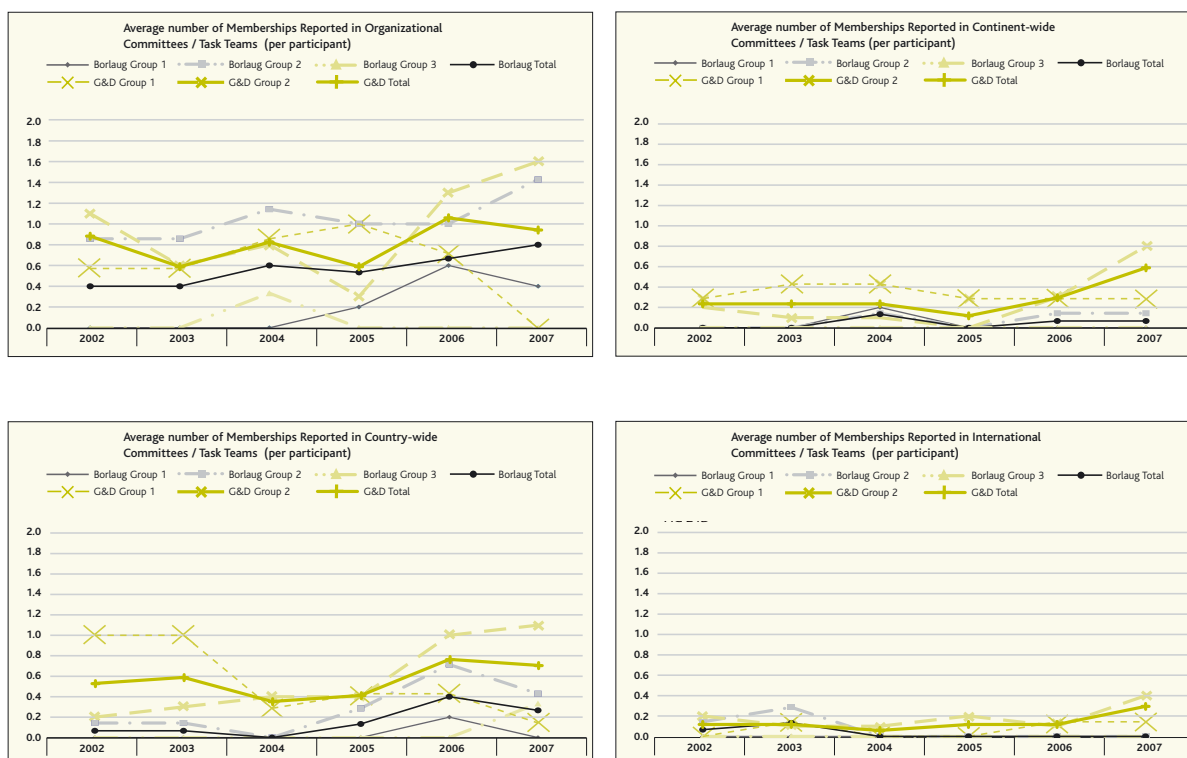


FIGURE 25 Conference Presentations

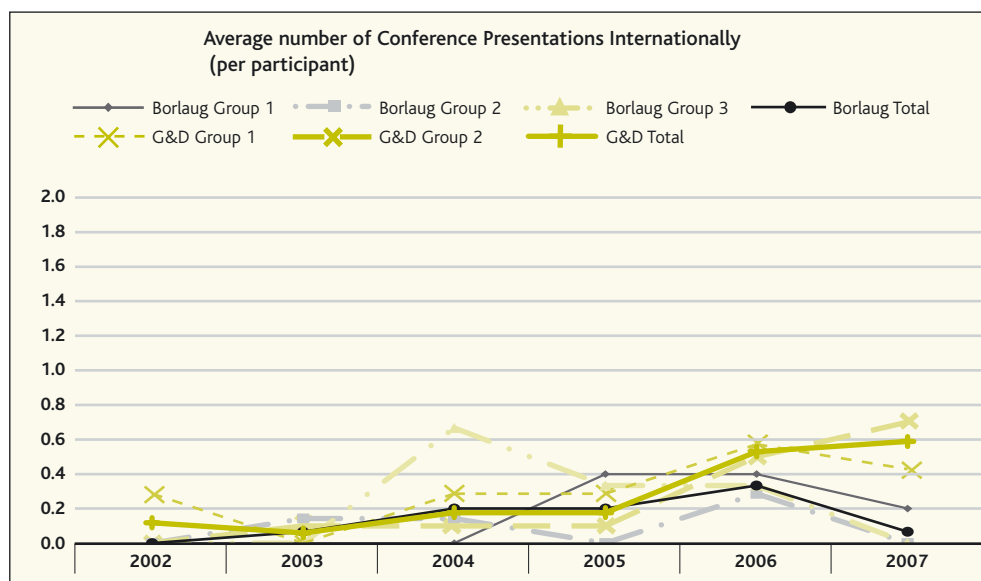
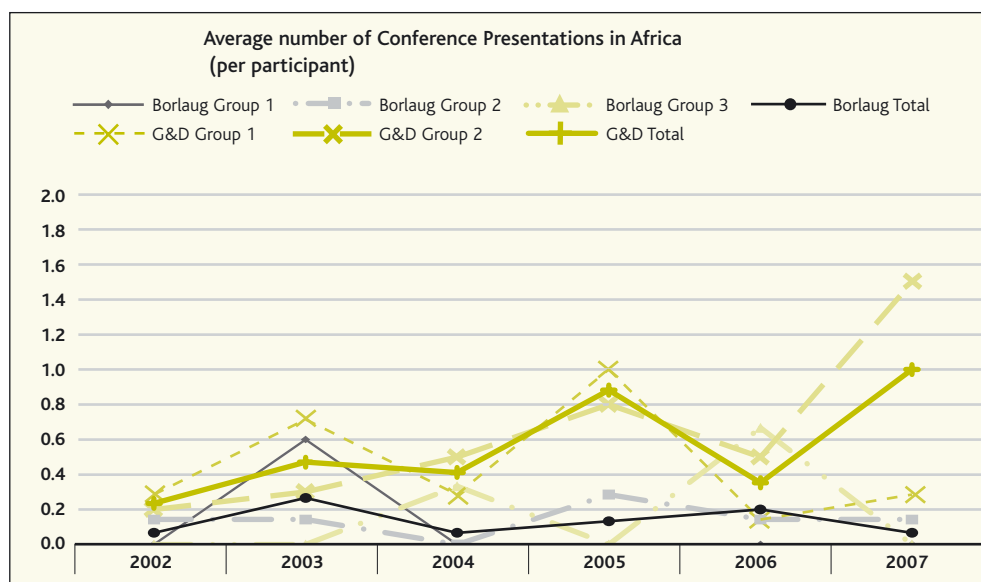
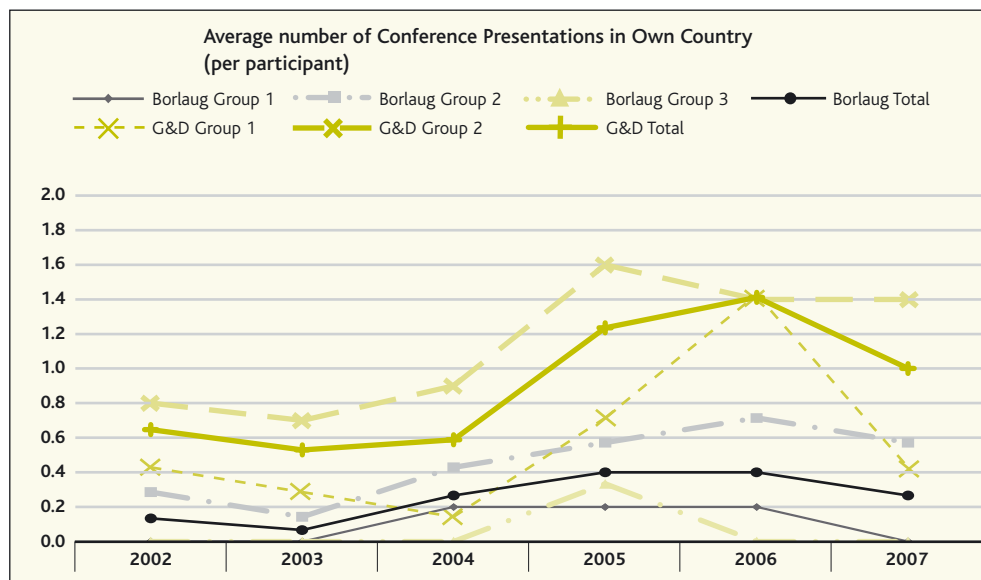


FIGURE 26 Leadership Positions

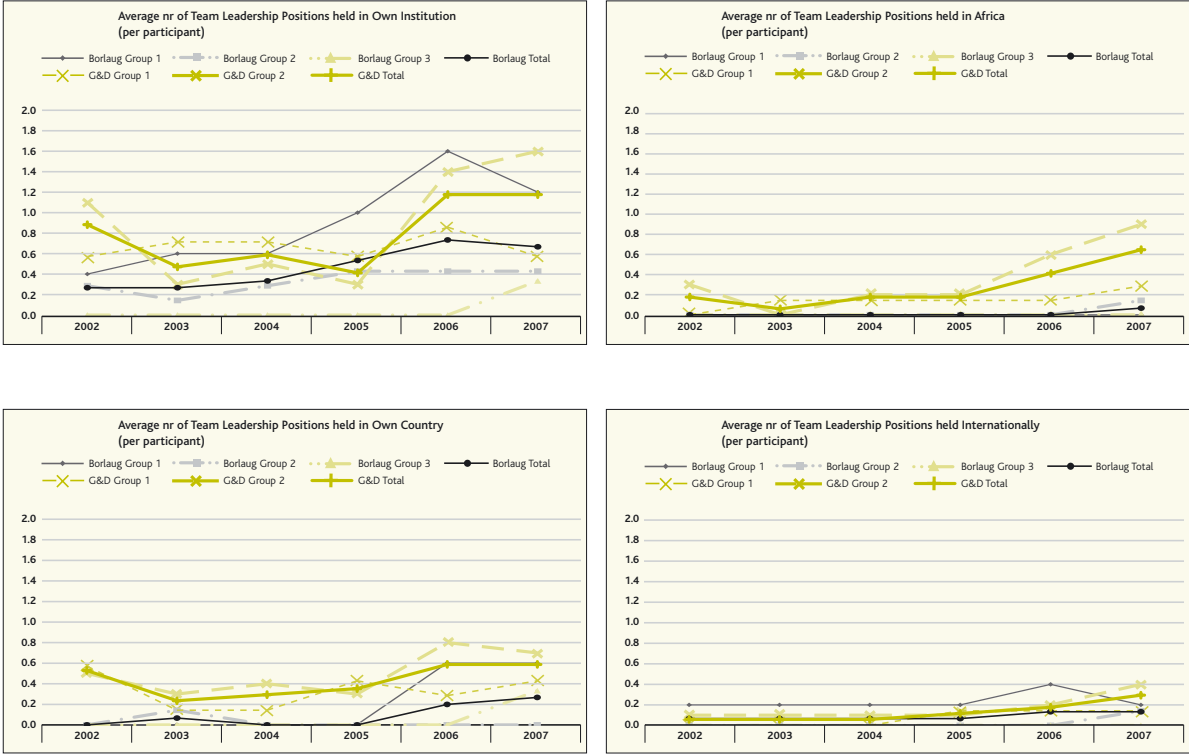
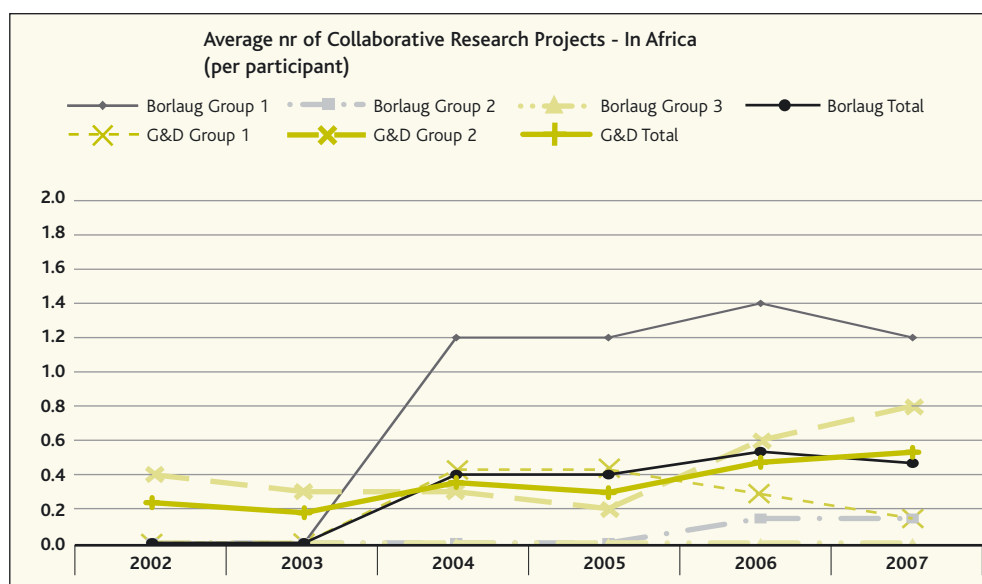
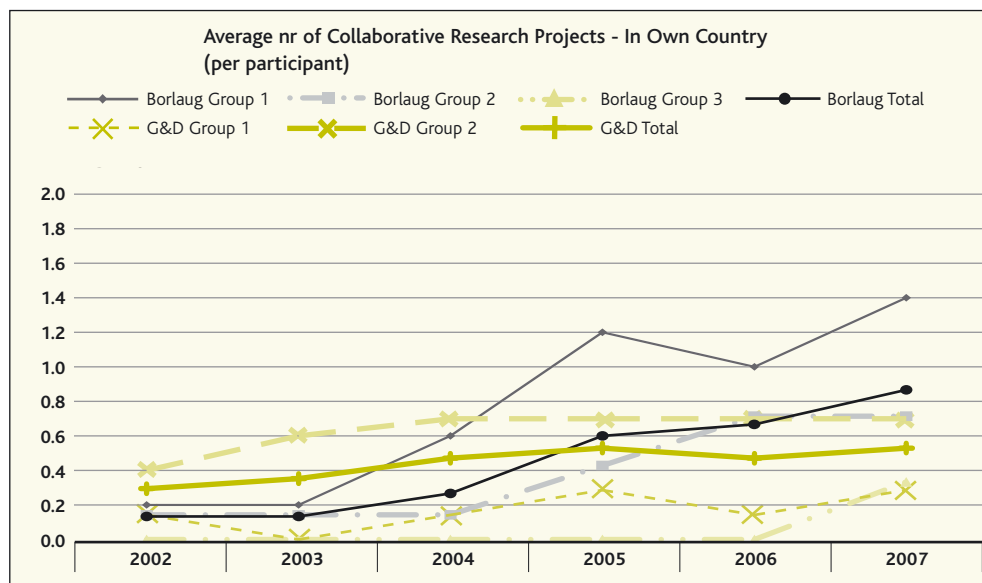


FIGURE 27 Collaborative Research



Fellows' Accounts of Outcomes and Impact

Borlaug WIS Program

BORLAUG WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

0. Overall change in my professional and personal life

0.1 How I have changed (if at all) overall as a person and professional through my participation in this program

- In general, participating in the fellowship program has enriched my personal life and professional life. I am now a better person than I was before winning the fellowship. It helped me to meet and interact with people from different cultures. It really broadened my mind.
- People tell me now that I can do things that I have not done before.
- I definitely know I can achieve all my goals; all I have to do is to dream big! I have now given up the habit of always being in the back seat and watching things happen. I have learnt to take up leadership roles and responsibilities both at home and at work and to make things happen myself
- The program has helped me to overcome fear! Am now confident in tackling my personal and professional challenges, this has enabled me take precise decisions which have made me grow/develop my career to a better level.
- The constant collaboration with G&D team has inspired and helped me realise the potential in me.
- The program was an eye opener; it rejuvenated my energy and has made me focus on my abilities, and on improving on my weaknesses. I have seen a personal growth in my interpersonal relationships
- I guess I am a lot more confident and more determined to impact my society positively. I feel empowered and equipped to do this after the program
- I realised I should not give up easily. I discovered my inner abilities. Without the Leadership course and Mentoring I would not have known how much impact I could make on others, even outside my work environment. I now feel that there is nothing that cannot be done.
- After this program I feel a mutation in my social and professional live (confident and not afraid to make a public presentation, to give my opinions about present situations). I have a new vision and orientation in my social and professional future. I increase my skills in giving and receiving feedback. The most significant change in my professional life is my self control and confident. I ask an open question and try to know and accept people with different characters and cultural concept
- I saw women who had been able to reach their career objectives and was inspired to do the same. Now I know that the sky is the limit. It has made me think positively
- The attitude is not to limit myself as a woman, but to see the opportunities in being a woman. Yes, it is a competitive world, male-dominated. But, with the right attitude, approach and positioning, I do get a good reward for my efforts. Most things we aspire to are within reach, if I do not expect the bar to be lowered for me. The standards do have to be maintained, I just need to do what it takes and as go on, I have discovered it gets a lot easier.
- I think I am more factual, less sentimental. I see reason why people do what they do. When I was disallowed from attending a training course because the crop involved was not the institute's mandate crop, I did not feel bad but saw reason. Thus, If the institute's work suffered, the institute is at a loss because the impact may not be felt.
- It reinforced my hope for the future. I was feeling alone within my environment, struggling with life to get my way out. By meeting with the wonderful women in science, they gave me more hope. And most of the time, they remind me to keep working very hard so I can succeed.
- This program has lit a fire in me... It has opened my eyes. I now want to do more for food security. It is not any more just about my career

BORLAUG WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

1. Positive changes in my social skills and attitudes

<p>1.1 In how I see and plan my career and my future</p>	<ul style="list-style-type: none"> • I understood myself better in terms of how I react to situations. I was also able to articulate my career goals better and to separate the important issues from the unimportant ones regarding my general development (both personal and professional). • My participation in the Mentoring Orientation Workshop organized by G&D helped me to prioritize and organize my career goals. At the end of the workshop, I felt more confident to rise up to any professional challenge • I now have goals, short term, medium term and long term and am working toward that end, of course with an allowance for modifications as time moves on. • I learned the importance of setting goals in my professional career and life in general. I am now aiming of earning a PhD in five years time • More self-assured, less timid in expressing my opinion and following through a plan when am convinced about the tenability of the ideas. In terms of my career, am a lot more focused plus goal and result-oriented • I now know what I should focus on, and how. • In the Mentoring Orientation Workshop organized by G&D, my Mentor and others encouraged me to pursue my PhD. and are currently trying to identify ways for me to do so at UF. • By working closely with my Mentor, I am better motivated. I am confident that the African women situation can change only my women. I plan my career to be the best in my work area (to participate positively in the African agricultural development , to fight poverty and hunger in the world and particularly in Senegal.
<p>1.2 In my understanding of, and confidence in myself</p>	<ul style="list-style-type: none"> • I now understand and appreciate my own personality better and also the people around me. I understand better why I am what I am. • I have attended professional meetings where my facilitation skills have helped me to be among the first 3 people to contribute (this was not the case before I attended the Mentoring orientation workshop). Often, I was the last to contribute or kept useful ideas to myself and then regret not sharing them when solutions to problems are not found or agreed upon. I also try to assess myself now and again • The CGIAR Women's Leadership & Management Course in Peru helped me to understand my own personality better and appreciate the diversity presented by my colleagues and superiors. The most interesting and beneficial aspect of the course was on giving and receiving feedback. After attending the course, I now feel more confident in rising up to the challenge of leadership. Before then, I always wanted to be in the backseat and be a spectator. I never initiated change. Now, after the course, I almost always volunteer to facilitate meetings and to lead group discussions. • I now speak with a lot more confidence and conviction. For example during the bilateral cooperation Needs Assessment workshop with my Ministry (Ministry of Agriculture), I was able to forward proposals on technical issues in my area of expertise (food safety) which were appreciated by other stakeholders and taken on in the development project. This was my first time to openly yield to requests of this nature and one important thing is, I realised that stakeholders in the Agriculture sector knew that there are problems in this area but solutions to these problems are not being perceived. I should say that though my contribution was not an end to the problems but at least it initiated insights in dealing with the problem. • I now have more confidence in what I do. Before I never used to speak in big meetings unless am first spoken to. I find my self initiating ideas and suggestions with my colleagues • I believe more in myself, I am convinced I have a lot to offer and can make that difference or change starting from my own little corner. • One thing about which I was particularly overwhelmed is how the CGIAR Women's Leadership Course helped me to know myself...my weaknesses and strengths, when I should ask for help and when I should be independent. This was done without making me feel inadequate. • Most importantly, I was able to build more confidence and better working relationships within my research team. • I had a chance to attend a professional meeting in South Korea. This fellowship has been very helpful because I felt confident at that meeting and I didn't have problems interacting and networking with people from different countries and social difference • I am a very confident person now. Before I would take anything that came my way and pity myself silently

BORLAUG WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

1.3 In how I communicate and work with my supervisors / more senior colleagues, and in how they react to me

- I have also learnt how to influence my superiors as well as my colleagues and peers. I know now how to be assertive and not arrogant.
- I have not have had much of a problem relating to my senior colleagues and supervisors , except that I was not giving feedback to them and expecting them to give feedback to me about my output at work. After the leadership course, I have been more effective with giving and receiving feedback and this has really helped to put me on my toes. It's like a monitoring and evaluation of your entire life - conduct, professionalism, relation with others etc. and this of course has enhanced both my professional and personal lives
- Emotional intelligence course has been instrumental in helping me develop better working relationships with my supervisors. I no longer free over burdened with work
- The leadership program helped me to appreciate the people I work with; it provided me with skills which have helped me learn to communicate well with my colleagues.
- My Communication skills have greatly improved. Am now more aware of myself and I do understand other people's feelings and I have learned to keep distressing emotions under control. I've come to understand my supervisor more and my relationship has greatly improved
- I am a lot more self-assertive plus I collaborate more should the need be, so I have improved generally in human relation. The result is that I achieve what I want with less friction
- I learnt about cross-cultural competence. How to understand people's thinking and relate with them, avoiding conflict. My empathy has increased
- Actually I lean more my supervisor character because I am able to know the good moment to communicate with him and give the questions. I am trying to work closely with him and to give positive my knowledge. I avoid a conflict situation with him and I try to give my opinion for the well done work. I spend more time in my work place and show him my determination of work. I respect him. I show him my motivation to mobilize all my energy and my competencies for the satisfaction of its works
- I have become assertive. I have learnt the skills of negotiation and use them very well to advance my ideas. I generally work very well with my bosses

1.4 In how I negotiate change or handle difficult situations in my professional life

- The course also equipped me with skills for dealing with conflict situations at the workplace and in my personal life. Before attending the course, my style of conflict management was mostly competition or withdrawal. I resolved in Peru to apply more of the collaborative and compromising styles. I can now see that most conflicts I'm involved in become win-win situations. The only thing is that more time is spent on resolving conflicts now.
- One of my direct reports has an MBTI preference for extroversion and at the same time he is a perceiver. I have always found it difficult dealing with him because he hates schedules, deadlines and meticulous planning. He always wants to live one day at a time. On the contrary, I am an introvert and a judging type, always wanting to plan and work according to planned schedules. I have learnt that we can maximise our individual preferences for an increased team output by understanding each other and giving ourselves room to operate. His extroversion preference can help attract more people to bring contracts to our lab
- I have learnt to exercise my power and authority accurately in handling difficult situations in my professional life. Before I enrolled for the program, I had served on my present employment for five years and my responsibilities had grown perfectly but I had no job satisfaction, but now the few months I have spent on my job after the program have been productive and I am happy with the progress.
- I have learnt skills that have enabled me improve my work relationships. These include skills for effectively managing conflicts and am able to apply them in real work challenges. I have successfully used skills such as accommodating, compromising, competing and avoiding. I have also managed to used skills for strategic influencing
- I have realised that annoyance which was my approach before doesn't work out, so I negotiate more keeping my goals and objectives in view in order to achieve the best results
- I learnt how to collaborate, avoid and compromise and when these are applicable. Therefore, I hardly find difficult situations unmanageable
- People now come to me and look at me more positively. In the beginning I felt I needed to fight. Now this is different. With my senior colleagues in, I had to use the conflict management skills learnt at the Leadership course to work with them. I was the youngest and the only lady at the department. And two male colleagues were not listening to me and were rejected whatever proposition I made for the work. I waited for two months then I went to talk to our common supervisor. We had a meeting together and got the conflict solved. And from then, we do consider me with more respect and we did a great job

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<p>1.5 In how I Mentor, communicate and work with my research team, employees or other colleagues, and in how they react to me</p>	<ul style="list-style-type: none"> • Skills acquired through the Mentoring orientation also equipped me to work better in a team. Now I don't assume what people are thinking, I rather ask a lot of open-ended questions, paraphrase to minimise any misunderstandings and even summarise whole conversations! I am now able to address issues without taking matters personally. I am able to give and receive feedback without hurting people and without feeling being taken advantage of or taking advantage of others. • I have been reading the G&D Funding News and sharing with fellow scientists in my institution. • Other achievements include attending a Research Scientists Review Meeting and volunteering to lead one of the sessions. I applied the facilitation skills of summarizing and paraphrasing and it was a successful meeting. • The nature of our work requires working beyond office time which does not appear in our job contract. Thus it is important for me to help my team to realise the benefits of succeeding in our work and with this I have to be a good role model for my team. • I know that I was over-bearing before the program, but I have developed a listening hear more and I have received commendations for this. I have also been able to harness the potentials of my subordinates this way. We have made tremendous progress and achieved more results. I have also learnt to delegate more.....less stress for me and good approach to training others • I learned to improve conflict management, and saw the need to increase my assertiveness by communicating in clear terms about what I want. Upon returning from the course, I held a meeting with my research team in my tissue culture laboratory to hear their views about what they needed for our research to succeed. I realized their need for theoretical knowledge and I am determined to train them. Together, we developed a mission statement, which reads, "To build a world-class tissue culture laboratory with end user-specific results". All these were achieved just by questioning and listening! • Also, I now understand the value of the diversity of my colleagues and have the necessary skills to deal with conflict • Apart from setting clear career goals, I also learned to set priorities for meeting deadlines. With these skills, I hope to be a better leader in my team. • Through the workshop I realized the need to find the balance between perfectionism and meeting deadlines • I have found that the facilitation skills I learnt really work. Employing them has made me a better communicator and a lot of the previous misunderstandings have been avoided. In our research team we all try to respect the views of others and encourage feed backs a lot. • I learnt a lot from my Mentor during the program. I am putting some of his ideals into practice back home. I now mentor colleagues in my dept especially women. I mentor them and challenge them to aspire for excellence in all they do and that no man can put them down if they don't allow it. Colleagues in the dept seek my opinion on almost everything. The current head of department seeks counsel from me from time to time
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1.6 In how I communicate and act towards my family and friends, and in how they react to me	<ul style="list-style-type: none"> I have become more tolerant of the faults of my friends and family bearing in mind that we are all different and that diversity does not mean one is mistaken. My friends and family appreciate the change in me and relationships are now more cordial since everyone feels respected by the other. My family and friends relate better with me because I have learnt to be a team player and to be open to the views of other people. Because I have gained a better understanding of my personality I have learnt to be more confident in offering suggestions and criticisms to others. In addition, I can now regulate myself better and not let my emotions have the better part of me, especially in conflict situations. The leadership program helped me to prioritise my roles and duties well as a mother, wife, young female scientist and employee. This has enabled me utilise my time well Due to my greater flexibility and readiness to compromise and take responsibilities, I am able to get more positive reactions from my family and friends. Oh, I communicate and act toward my family and friends with respect. To those who are older than me, I have to find a polite way to tell them what I think and they do appreciate my ideas. And my friends appreciate the openness with which I share with them I now know that everybody is important in the home and we have equal rights and privileges. The program enables me to understand my children more and how they reason. It enables me to see things from other people's perspectives.
1.7 In how I build and use professional networks with others	<ul style="list-style-type: none"> At my institution, I have started networking with people from different fields of study and even those I hadn't talked to before. Some have expressed interest to collaborate with me and my department in future projects! Furthermore, I have also shared these skills with friends and acquaintances who work at other organizations and institutions The networking opportunities offered by the CGIAR Gender & Diversity Program (G&D) have given me a broader perspective on issues relating to gender in the global context. I used to think gender was only related to issues on women but I have realized that gender is a broader concept. The benefits of the network of Borlaug and Rockefeller women scientists cannot be over-emphasized. We share news on personal development, career development and enhancement and news on funding opportunities. It is an excellent network! The program has helped me learn to identify professional networks beneficial to my area of specialisation, like if I hear about someone's achievements/research it's now easy for me to introduce my self to that person and I can now easily identify potential areas of benefits with particular networks I get The most important impact I gained from the fellowship was the networking. For example, I met with three graduate program coordinators of different departments at the University of Florida (UF) and we discussed the possibility of pursuing my PhD. in their departments. I have yet to follow up on this matter.
1.8 In my organization's support of, or attitude towards the WIS program and my participation	<ul style="list-style-type: none"> I have also passed on some of the leadership skills I acquired during the fellowship to my colleagues and I was working on organizing a leadership course for scientists in my institute. Although this seminar I wanted to organize did not materialize due to a few reasons, I am positive that I have imparted some friends and colleagues with the skills I have learnt. Through the seminars I have given and the information I share with my colleagues about G&D news, funding news, conferences, at the centre now we share information even from other sources on what is relevant, and people are now than ever willing to participate or at least know what is available in the program or other programs. My participation in this fellowship program has benefited my institution because I have been able to introduce new interventions in improving the safety and quality of food product evaluation. I have let others know of the program and its benefits since I was the first one from my institution to participate in the program. I Since my participation, I have seen myself given more leadership roles and assignments by my superiors, a sign that that they are now believing in me.

2. Positive changes in my scientific, research or business expertise

<p>2.1 In how I conduct my research or business projects</p>	<ul style="list-style-type: none"> • The G&D newsletters also contained very important information such as articles, research findings, reports and links to journals and scientific publications which I have used in my literature reviews to support my own research findings. It also afforded me the opportunity to share useful information with friends and colleagues. • I now do better research. I disaggregate data for gender for example, and look better at issues. It has improved the way I analyse results and give recommendations. • I also interacted with people of diverse disciplines, both Mentors and Borlaug fellows and I have realized that we can work together as a multi-disciplinary team. For example, through interactions with Mentors of other fellows, I learnt that food science is directly related to Plant Breeding and Plant Pathology. My interaction with students and faculty of UF through seminar presentations has created the basis for a network of professionals in which we share ideas and solve problems together. • Now am more professional, I for instance I have realised that to write a winning proposal you need to have the right composition of researchers and collaborating institutions, so this year instead of being the PI in the proposals that we submitted, I collaborated with colleagues from the university and let them take the lead • The program helped me realise that networking with other people on a given project promotes information sharing and saves time. I am now preparing my research proposal; I have been able to get assistance from different fields of specialization related to my project. • My participation in the program has provided me with additional skills and resources and this has built my competency to do other types of work in research, take more roles in the sorghum and millet market research team. I now have confidence in my leadership and I have a stronger desire for action. I hope to take a leading role in the team. Apply the skills that I have learned in research methods by putting up my own proposal for research funding and once funded I hope to be a lead researcher. • I realised that to attract grants for research, most granting bodies are on the look-out for multidisciplinary and regional projects. The network of contacts I have both in Africa and in the USA now make such research proposal feasible. • I realized that the most important aspect of transfer or adaptation of technologies from developed to developing countries is the goal for which they were developed. • I conduct my research using internet for information (frequently using Google for research data), I am using a statistical news for analyzing my data collection. I spend more time in the field and laboratory. • The knowledge acquired has enhanced my research projects. I brought some seeds of specie of the moringa different from the specie I took along for analysis. The new seeds have been planted and it has higher nutritional value. It is shocking to find out that the animals are not eating the leaves like the former one. We are now investigating the reasons for it's unpalatability
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<p>2.2 In applying new knowledge, skills or methods learnt during the WIS program</p>	<ul style="list-style-type: none"> • My participation in the Mentorship program at the University of Florida has brought positive impact to my professional life through the acquisition of the following skills and opportunities: Program Planning & Evaluation, Gender Analysis, Analysis and Interpretation of Research Results as well as networking and seeking potential scientific collaborations. • My stay at the University of Florida (UF) and the interaction I had with my Mentor enabled me to handle almost all equipment in the Post Harvest Laboratory with very minimal supervision. I studied post harvest management of fruits and vegetables which is helpful to my work in Ghana as a Food Scientist and gave me the opportunity to educate my colleagues (scientists and technicians). • Also I am in the process of having the food laboratory under my department internationally accredited; the knowledge acquired on food safety systems during the Mentoring exercise has helped me in improving our quality system. • I was able to use facilitations skills and also participatory methodologies during my training for Public Extension workers that was held in Monze from 30th July- 3rd August 2007. Am also able to use computers skills in Linear programming in my class- a skill I learnt while attending a class in ethnographic linear programming. • From the Borlaug training, I discovered new techniques of diagnosing fish diseases that was not necessarily expensive. This I was able to utilise right after I got home • I realized that I have to speak-out, and tell people what is new and useful that I have. Thus I delivered a seminar titled "Dry-season vegetable production: a comparison of the Nigerian and Florida scenarios". People realized the potentials we have in Nigeria, and how to get there. A relationship developed between my institute and the National project on irrigation. • I also received excellent exposure to new scientific techniques by working closely with my Mentor with a new GIS (Global Information Systems) software package. However, I am now using the DSSAT (Decision Support System for Agro-technology Transfer) software. My dream is to link the two packages (DSSAT and GIS) for a decision making tool. • Through this fellowship program, I had the opportunity to attend lectures in virology, visit an experimental field and a plant clinic, and learn how to detect Begomovirus presence using Polymerase Chain Reaction (PCR) and the Enzyme-Linked Immuno Sorbent Assay (ELISA) test. I also learned different methods to inoculate tomato with the Yellow Leaf Curl pathogen. I now use these new scientific techniques in my work. • I worked with my Mentor on new molecular biology techniques that I can apply back home. • The tissue culture techniques I learnt in UF have enhanced my research work • The knowledge acquired is being passed on to my colleagues and students. The knowledge gained has enhanced the quality of my Ph.D students research and my role as their supervisors • It has helped me to think in new ways about my research. I have learnt new technologies, including RAPID methods. I am working with, thinking how to adopt the technology. Now I am thinking how to get the best out of these things. I admired the way my Mentor manages her time, delegates, does team work and combines family with professional work. I had exposure to real lab work.
<p>2.3 In how I raise money for research or business</p>	<ul style="list-style-type: none"> • I have been reading the G&D Funding News and sharing with fellow scientists in my institution and I am currently seeking support for my PhD studies. • The G&D Funding News is of immense practical importance. It provides me with opportunities to apply for grants, thereby building my expertise in proposal-writing and electronic networking. • Through the G&D Funding News, I am also constantly updated on funding opportunities and scholarship. • I was made the Chairperson of the alumni in my department. I have been able to raise funds for the department and also donation of equipments by our alumni. I was made the Chairperson for the Fund Raising LOC for our National Association Conference which we hosted earlier this month. I also have been able to secure a university research grant for my research

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<p>2.4 In how I understand and deal with external barriers to, and opportunities for my work (e.g. in the policy environment; the situation of farmers)</p>	<ul style="list-style-type: none"> • I communicate better than I did before, including with farmers. I will share my new skills with them so that it can also trickle down to them. • Although my work is not directly related to this aspect, I believe I can positively deal with such situations when need arises • Going through the program has trained me to accept feedback from the people I am dealing with, e.g. on a routine basis my unit requests for feedback on our services from our clients (processors and farmers) • The leadership skills and modules are quite helpful. It helped to open the doors of possibilities and at the same time trained me to be able to harness the possibilities. I know most things are possible to achieve with the right approach and disposition • I am able to manage such conflicts by showing the object of conflict as evidence. Somebody was mandated to make a poster of on-going research in my institute. He failed to do it, claiming that he did not have the electronic copy of the poster, which had earlier been sent to him. So I recalled the diskette, showed it to him and he had no choice but to do it
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3. Positive changes in my professional circumstances and opportunities

<p>3.1 In getting promotion or new career opportunities</p>	<ul style="list-style-type: none"> • Through the G&D network, I have seen a lot of career opportunities. However, my focus is not on that at the moment. My immediate goal is to pursue a PhD program. During The Mentoring Orientation Workshop, I was able to streamline and prioritize my career goals, top of which is to pursue my PhD. • I now am working towards becoming a policy analyst, and am currently attached for one year to the Kenya Institute for Public Policy Analysis and Research (KIPPRA) to learn and gain some hands on experience and develop new networks • The sky is the limit! Going through the program was my great achievement, one; I have an association to which am affiliated to (WIA in Africa) and two; my personal and technical skills have greatly improved. Am confident to go through any form of screening exercise in my profession • I am more pushful now and have a "can do" approach, which is very noticeable and has attracted additional responsibilities • My meeting with Prof JW Jones from the Biology and Engineering Department of UF was of utmost importance. Through this networking effort, I was appointed Research Assistant at the Department of Agronomy at WARDA (Africa Rice Center). • I haven't been promoted yet but I am seriously working on it. I know in a year or two, I will be promoted. • My promotion to full fledge Professor has been initiated. I now see myself getting a career in mainstreaming Gender issues in the near future • I made a career move over the last six months because of this program. It opened my eyes and made me look at obstacles and issues in a different way. We were taught to analyze problems in our institutions and analyze how to solve them. I felt my potential was not recognized and a male colleague was promoted ahead of me even though I was better qualified. So I moved to another institution. I now have a sense of confidence, knowing I moved up the career ladder. I feel I have a voice.
<p>3.2 In getting awards, scholarships, etc. recognising my progress or achievements</p>	<ul style="list-style-type: none"> • I have not yet received any award or scholarship but I am positive that one will soon come my way. • I have a more competitive attitude towards awards and scholarships. Also, I realised that with the Borlaug fellowship on my CV, I have an added advantage. This door has lead to even more open doors. I m the 2007 Eisenhower fellow from Nigeria. I was selected amidst 12 other qualified men and women. • When I attended the Annual Conference of the Genetics Society of Nigeria, I was nominated to be the Business Manager of the Society and had to give a speech against other qualified candidates. Prior to my participation in the Borlaug fellowship, I would have declined the offer. However, I took the challenge, gave the speech and was elected into office! This was because I put into use the principle of competitiveness, assertiveness and speaking-out. • Through the DSSAT ListServer, I got a scholarship for my PhD program. • I all ready apply for the Ph.D programs fellowship in different organization and I am waiting. • It has helped me to get a research grant. I was also given a Carnegie sponsorship to attend an International Workshops for Women in Higher Education in Africa and to attend South African Institute for Advancement. The workshops took place in South Africa earlier this month

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3.3 In opportunities to lead and guide, e.g. serving on research teams, task teams, advisory committees, discussion groups, etc.

- The program that has made the greatest impact on this aspect of my life is the Management and Leadership course we attended in Lima last year. Before this course, I was an introvert who always loved being in the backseat, being a spectator and watching things happen. I never contributed voluntarily to discussions unless I was called upon to do so. I never volunteered to lead any group or team to undertake any work. My paradigm shifted during this course when I was exposed to topics such as "Understanding your own personality better, Facilitation Skills, Working with Diversity and being a good team player, Skills for giving and receiving feedback and Skills for Effective Conflict management. These, together with practical sessions that we the participants undertook have helped me to be a better person and I now find myself volunteering to lead discussion sessions and to be in research teams in my institute. I have realised that there are a lot of opportunities made available to you when you are a leader. Your team members criticise you and give you feedback. This allows you to work on your bad points and to improve on your good points.
- After the fellowship I greatly contributed to the improvement of the food laboratory in my department, this won me the responsibility of being a contact person in the laboratory accreditation process
- I was selected by the head of department to be a national team leader for the socio-economic component of a multidisciplinary research on "Analyzing Consumer Acceptance of beta-carotene dense "orange" maize in rural Zambia
- I see myself has somebody, who has been fortunate in my career and development. I am very willing to give back into my society through Mentoring and other ways. Which I am finding myself doing more. In recent times, I have had people from outside my institution approach me for advise and general Mentorship. Because I now believe I have something to offer, then am more willing to yield to such requests.
- I have been told by my supervisor that I will lead the PhD research team. Before joining the WIS program, I would have declined this offer. But now, I have accepted it and I am waiting to meet with all of the students and find the best way to collaborate with them.
- Formally I wouldn't offer to lead in any team. Now I readily accept challenges that are thrown to me. After the job is done people tell me it was very well executed
- I am a member of Interdisciplinary research group in my Institution and a member of the Directorate of Linkages and Sponsored Research in my institution. I was invited as a Consultant to The International Trypanotolerance Centre in The Gambia June this year. This gave me the opportunity to visit their research sites in both The Gambia and Sierra-Leone. I was also made the Chairperson of our Research Committee in the department

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3.4 In opportunities to collaborate with others	<ul style="list-style-type: none"> • I also interacted with people of diverse disciplines, both Mentors and Borlaug fellows and I have realized that we can work together as a multi-disciplinary team. For example, through interactions with Mentors of other fellows, I learnt that food science is directly related to Plant Breeding and Plant Pathology. My interaction with students and faculty of UF through seminar presentations has created the basis for a network of professionals in which we share ideas and solve problems together. At the moment, I am corresponding with my Mentor and other UF faculty regarding pursuing a PhD program at UF. • Networking with other fellows and especially my Mentor has opened some opportunities to collaborate. An example is in my professional research my Mentor helped linked me with another individual in Florida, who is willing to collaborate on some aspects outside the expertise of my Mentor • The greatest benefit to my institution and the local farmers was the seminar I delivered entitled "Dry-season vegetable production: A comparison of the Nigerian and Florida scenarios." I compared vegetable production in both countries, and government efforts, people's participation and opportunities for exchange, learning and improvement. Government representatives, research scientists and farmers attended and consequently, my institute has developed a collaborative relationship with the National Fadama Development Project of the Government from which more farmers will benefit. • Through this fellowship program, I am also in a better position to initiate collaboration. My ex-supervisor from ICRISAT-Mali is a GIS scientist and I would like to work in collaboration with him on a project using GIS. My current supervisor has shown interest to collaborate with UF on a project on rice modeling using the DSSAT package. • Personally I have a chance to collaborate with different people with different social and economical different and the leadership and management course is very helpful for me . • I enjoy working in teams now because I feel equipped to be able to make an impact and I am not afraid that I may not be able to communicate or make a good impression in the team. • I am still in collaboration with my Mentor during the WIS program. I also have collaboration with other scientists in other Institutions in the U.S and Europe. I still network with other fellows too
3.5 In how I access information that can inform my career and professional life	<ul style="list-style-type: none"> • Through the G&D Newsletters, I have been able to identify with issues relating to women in the workplace and how women balance their professional lives and career goals. I can also apply some of these concepts to my own life. I have been reading the G&D Funding News and sharing with fellow scientists in my institution and I am currently seeking support for my PhD studies. • I have been able to form networks with academicians, community associations and other government bodies in line with my area of specialisation. • CGIAR Gender & Diversity Program's (G&D) electronic newsletters have been very helpful in my search for a post-doctoral position by providing timely information on vacancies for such positions. Although I am yet to secure a position, responses from places to which I have applied have been encouraging. I find the G&D fellows' updates to be a career motivator, as it disseminates information on achievements and speeches of outstanding women worldwide. It also fine-tunes my professional orientation. • I find the Fellows' Updates provided by the CGIAR Gender & Diversity Program (G&D) on scientific conferences, workshops, etc. very useful. • I also belong to other scientists groups like DSSAT ListServer and Software developers • I found the electronic newsletters provided by the CGIAR Gender & Diversity Program (G&D) very helpful for my research work and my professional career
4. Any negative changes observed or experienced as a result of the WIS program	
4.1 Negative changes in my social skills or attitudes	<ul style="list-style-type: none"> • None
4.2 Negative changes in my scientific, research or business expertise	<ul style="list-style-type: none"> • None
4.3 Negative changes in my professional circumstances or opportunities	<ul style="list-style-type: none"> • None

G&D WIS Program

G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

0. Overall change in my personal and professional life

0.1 How I have changed overall as a person and professional through my participation in this program

- The impacts of the program for my personal life have been quite amazing! I know the sky is the limit and I am not afraid to reach for it!
- The G&D team all inspire me and have been my encouragement. Knowing that there are people supporting you all the way has made a world of difference.
- Being a part of the G&D fellowship program has been one of the best opportunities that I have had in the course of my career. It has given me the key to the world where "Nothing is impossible".
- I must admit that, this program has indeed accelerated my talents and potentials professionally. I also see good changes in my personality. This program has brought me a long way in the way I perceive myself and has instilled confidence in me.
- I am more confident than before I joined this program. I push my point forward without being intimidated by others. I listen more to other people's points of view. I set my goals and try to achieve them
- I know I am worth it. I can do the job as good as the next man or woman. I can contribute to change in my society even though I cannot change the world
- You cannot measure this, but I know I have changed. I am now much more positive. I can see the difference in what I do and how I do it. And I can use it forever. It is a value that is instilled, and this will last.
- Now I feel I have an extra weapon to take me through. I am more confident. I have more belief in what I can do.
- It has helped me manage my anger.... The leadership training opened my life, peeling me like a banana, getting me healed. It showed me what kind of person I am.
- The impacts of the program for my personal life have been very evident to me and others who have known me for years as an Introvert. I am totally transformed. In the past Whenever I was offended I would hurt and feel bitter and never made an effort to find out what was wrong with me or those I was relating with. I got addicted to self pity that kept me cry for many years removing energy from me. But now I am more assertive. I have discovered my strengths and weaknesses. I have worked on my weaknesses and I find myself more composed and enjoying my life every where especially at my workplace better than before participating in G&D Program. I have discovered I wasted time worrying and blaming others rather than solving problems by changing myself. All those involved in G&D have made me part of them, particularly those in the G&D office, they kept monitoring how I was getting on with my goals and serving as a catalyst to point out my potential and encourage me to realise my potential. They tirelessly sent useful information that would help enhance my professional development. I worked hard to improve on my CV to increase my chances of getting promotion. My attendance of International conferences has increased my visibility and networks, some of whom are now my collaborators in various projects. I feel like I am born a gain. My Mentor also helped me change habits which hindered me from being visible e.g my dressing styles and speech. I now dress better and try to project my voice so that people can hear me.
- My Junior Mentee wrote a report and expressed how she had benefited from my Mentoring. She was shy. Now she is in Norway. This has really given me something, some pride in what I did."
- This made me courageous, proud to be a woman in science. I want to stay in Africa where it is difficult
- This has been a life-changing experience for me. It has been a turning point in my career and my professional life. I had been feeling burnt out, not getting anywhere. It has been a self-discovery, understanding what failure is, my personality.

G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

1. POSITIVE CHANGES IN MY SOCIAL SKILLS AND ATTITUDES

1.1 In how I see and plan my career and my future

- I have learnt how to set career goals annually, and to review whether I am improving or if the goals need modifications on a monthly basis with my Mentor. Before this fellowship, I was doing my PhD but my motivation was waning. Now I have a clearer vision of where I want to go after this.
- From my participation in the fellowship program, there have been several important impacts in my professional life. I am able to set achievable goals and act on them. I am now very strategic in whatever I do with respect to my career and I have turned into an excellent negotiator.
- This program has helped to plan my future by frequently looking at the set goals which I determined at the beginning of the program and monitor my progress and adjust my activities.
- I have learnt how to set career goals that can make a difference in my life. I realised I needed a bigger picture rather than my usual research work in my field. Now I am involved in bigger projects which give me the opportunity to interact with others and get funding and training opportunities. Before this fellowship, I was not seeing the importance of the networks that I was involved in, but now I have strengthened my existing networks and created new networks to maximise benefits from their strengths e.g resources which they have. I am planning to write more collaborative projects, in order to learn new skills. The Career Goals that I set and the inspiration and direction given by Mentor have contributed to my career development and opened more opportunities e.g access to information.
- I continuously look at my goals to see where I am and what I should do to get on track
- I have been promoted to a Project leader and this is the post I have worked for

1.2 In my understanding of, and confidence in myself

- I now speak with a lot more confidence and conviction. For example during the YPARD (Youth Platform for Agricultural Research for Development) meeting in Morocco (2005), when that decisive moment came and the group leader asked for someone to be the rapporteur, there was silence... I raised my hand and decided to volunteer!! Rapporteur and volunteering increased my visibility during the meeting and I am in touch with the current developments of this network to become a voice for the 'young researchers' in the CGIAR.
- I am much more confident in taking the steps that I set out to undertake in the process of achievement of my Goal
- My participation was sponsored by this fellowship program. Here, I had the audacity to challenge reputable potato breeders that for once they should turn round and re-examine the potential of the lesser known vegetables in Africa. The responses were overwhelming.
- Loreto Convent Msongari - Guest Of Honor on 22nd September 2006. I wrote a speech that came from my heart and the response was overwhelming. The students, teachers and parents were appreciative. I even got invitations to other schools of the Loreto Sisters.
- I feel big improvement in myself, as if something has been lifted out of me."
- I feel more courageous, empowered, realize it is all about fear. I now have the tools to do it. I can be confident."
- Appointed member of Board of Directors ofAgricultural College by the Ministry of Agriculture. At the inauguration at KARI Headquarters on 2nd Oct 2006, after the Minister gave his speech, he asked if anybody had a question. Apart from the reporters, nobody wanted to ask a question. I had a question and I took a bold step to ask that question, I want to believe that the way the minister responded to this question gave me visibility and appreciated that the question was pertinent. This has played a crucial role in how the other members in the board perceive me. During Kisumu ASK show in August 2007, the minister visited our stand and specifically asked for me and according to my colleague, the minister seemed to know me so well and stated that we were doing some projects together and this also is a manifestation of the impact of my question as that was the only time I met the minister.
- I used not to believe in my potential, always feeling inferior to others which made me feel uncomfortable in leadership positions for fear that I would not be respected by those I lead. I used to fear to talk openly to people I considered superior as a result I missed great opportunities. I now believe I am as good as others and I find myself interacting with those I used to fear and I am getting what I used to miss. I now have the courage to apply for International jobs and lead others, write competitive proposals for funding. I speak with confidence and now command respect and recognition. For example when I was requested to chair a session during the International Biotechnology conference held in Italy. in 2006, and during the IRMA Planning meeting, I did it with a lot of confidence and found it enjoyable. I became very visible and have since then been given more opportunities to chair and lead. My visibility has also increased my opportunities to be invited as a guest speaker to share my experiences. For example I was invited to South Africa to share my research experiences with small scale farmers in Kenya.

G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT	
1.3 In how I communicate and work with my supervisors / more senior colleagues, and in how they react to me	<ul style="list-style-type: none"> • My Mentor has encouraged me to develop a working relationship with my supervisor and she has also talked to him personally. I haven't yet told her but it's amazing that I am now so happy in dealing with him and more relaxed. • I have a better relationship with my superiors because I now proactively strive to create a peaceful relationship with them. This is because I now know that I am responsible for my own happiness at my place of work. • If this incidence happened before I went through the program I would have taken it personally and became emotional and hysterical about the whole issue and would not have been able to give the true picture of the situation. Thanks to G&D Program. It is very important to clearly communicate so that you can be clearly understood • I am more conscious of the people around me when I received my 360° report it opened my eyes to what I was doing wrong and when I improved on the areas my colleagues pointed out I am achieving better results from team work. There is more cooperation than before • I relate well with people at all levels and have learnt to respect, listen and recognise other people's personalities and abilities. My Mentor has conducted role plays with me to share with me the best way to relate with people without hurting them. I also learnt from the leadership course how to cope with difficult situations through skills such as emotional intelligence and avoiding conflict. I used to have difficulties at my workplace e.g Not given an office, was left in a lab after my PhD for many years, no facilities like vehicle and Computer, while others were given. My Boss never showed any interest in my work, even when I took troubles to invite him as a chief guest during workshops, I organised, he would not turn up. I made an effort to talk to him as politely as I could but let him realise the importance of his support to help me be in a better position to lead. The recipe of the trainers during the leadership course worked. I am now enjoying support from my boss and have a nice office. I have been given more leadership roles at my workplace and more people have joined the section that I lead. • Although my supervisors are not very easy people to deal with, I have learnt how to handle them
1.4 In how I negotiate change or handle difficult situations in my professional life	<ul style="list-style-type: none"> • I have learnt important skills such as facilitation, team building, feedback and handling conflicts as well as negotiation skills, which are great assets for me as I move into the working world. • My Mentor is also an inspiration and role model for me. She is a very busy person but she never fails to follow up on our appointments. She has become a good friend to me and the way she tackles difficulties has been a learning point for me. • I believe that my participation in this fellowship has benefited my institution. In my role as Crop Protection Coordinator in KARI, I introduced changes (using the change management approach), which have direct technical and monetary benefits to the institution. For example, I set up a system in KARI for evaluating pest control products for the industry, which ensures that both parties adhere to a contract signed between the two entities. In this agreement, KARI is now paid a fee by the client 'industry' for each of the pest control product evaluations conducted by KARI. Therefore, KARI is now generating revenue from this service (which was not the case before my appointment). Also, in this system, the KARI scientists are obliged to deliver timely results for the trials to ensure timely decision making on the pest control products by the regulatory agency (PCPB). • I have gained the ability to negotiate with others in order to get what I deserve. After attending the Negotiation Skills Course in the Philippines, I applied the negotiation skills when communicating with my Vice Chancellor and two weeks after the training, I was appointed Director of the School of Graduate Studies. I would have never dreamt of doing something like this before. I also realize that in negotiations we should aim at a win-win outcome. • Another recent scenario, is in an endeavour to achieve one of my goals of becoming a full professor, I applied for this post at and Universities called me for interview on 3rd of May which I passed and received a letter of appointment on 14th of August 2007, their terms of service were not good enough for what I thought was my worth as a professional and to make it worse they were offering me a salary KShs 20,000/= less than what I am currently earning as Associate Professor. At first I was very upset, but on second thought I decided to use my negotiating skills. I did a letter to the Officer who had written to me the appointment letter the details of which I may not go into now BUT the bottom line is that on Friday 28th September, 2007, I received a letter agreeing to what I thought I was worth that means that I can and will take up the post but I knowUniversity will put up a spirited fight to keep me. I will handle that when it comes using the skills I have learnt so far. • I have learnt not to let opportunities go by negotiating and influencing others e.g by writing good reports while collaborating with others and giving good reasons for not doing certain things as requested by my bosses. I have also learnt important skills such as Paraphrasing, group dynamics, giving feedback and handling conflicts which have improved my ability to survive in difficult situations and maintain good working relationships.

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1.5 In how I mentor, communicate and work with my research team, employees or other colleagues, and in how they react to me

- I have also started informal mentoring where I try to encourage as many people as I can and to inspire confidence in them.
- Being a Mentor to my junior mentee has taught me a number of things. Firstly, she is a very outstanding and hardworking person and this provides good motivation for me to strive to excel. Secondly, I know that I can be a leader and guide another person towards success in her field. Thirdly, I want to continue to be a good role model for my junior mentee. This has helped me to strive to be exemplary in all that I do.
- The skills acquired in this fellowship and through the mentoring relationship, have helped me to be strategic and always plan each meeting well. This has enabled me to build relationships much more easily and also keep alive the networks developed in these meetings. It is now very easy for me to introduce myself to strangers in meetings without feeling worried that I might break some cultural taboos. I am conscious of what I say and how I conduct myself the first time I meet someone; because I have learnt that 'First impressions have a lasting impact'.
- Through my relationship with my junior mentee, I realized that to be an effective Mentor, I have to be a good role model – this will make it easier for her to have confidence in me. I also have to work hard and rise up to higher levels in my career – this will help my junior mentee to trust the skills that I teach her. Although I have always had a talent for training people to be independent, my Mentoring relationship has helped me to encourage my junior mentee to understand that 'she is responsible for her future', and should therefore never waste a single minute blaming anyone else for any aspect of failure in her life.
- I have the ability to facilitate meetings more effectively as a result of attending the CGIAR Women's Leadership & Management Course in Addis Ababa. As Director of the School of Graduate Studies, I sometimes have to chair some very stormy meetings where important decisions are to be made. I have managed to chair meetings successfully and comments from the members have reaffirmed this. I have successfully chaired 10 SGS board meetings and achieved the participation of even the very quiet members of the board and regulated the dominant ones. This success I greatly attribute to this program.
- As a team leader in national and regional research projects and as a director, I have been able to understand the differences between team members. Not only do I appreciate them, but I am tapping further into their potentials to keep the teams together.
- Through the 360° evaluations, I realized that I had been a poor listener and I had the tendency to interrupt people while conversing. I am now making deliberate efforts not to do so. In the past, I used to take things personally, especially when there were conflicting ideas, but after learning my own personal style of Extrovert, Sensing, Thinking and Judging [ESTJ], I now understand why people act the way they do and try to accommodate them when we are in a tense situation. I have become more confident and open. I am inspired to keep going even if things get tough. I have also made efforts to develop my emotional intelligence when dealing with people at any level.
- After the leadership course my communication skills improved. Before I used to just give instructions without asking for contributions from the other team members which made me a bad team player but now we all contribute and better results are achieved. My team mates are more cooperative
- From my own experiences at my workplace and the leadership course, I learned that supporting and encouraging others is very important for a healthy and enjoyable team spirit. I am now more supportive to the team that I lead, I try to involve them in my research activities and delegate duties, so that every member of the team feels comfortable. I also Mentor many young and even older scientists by sharing skills that I learned from the leadership course and my Mentoring relationship. I have actually become a role model at my Institute and Centre. I have been invited to several fund raising functions for schools and I use that opportunity to contribute financially and Mentor young girls in schools. I also mentor a junior mentee whom I try to guide in professional growth and assist in skills which I have. For example we are both travelling to Mozambique to attend the International Symposium of Root Crops and present a paper which we have co-authored. I ring her quite often to monitor her progress towards her goals.

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1.6 In how I communicate and act towards my family and friends, and in how they react to me

- In my personal life, my people skills have improved significantly. I strategically create time for people, which has in turn significantly improved my network. I have also developed unbelievable levels of patience and a positive outlook to life. This has had a significant impact on my appreciation of life and what it has to offer. My participation in this fellowship has made it so much easier for me to understand my own teenage children and to find joy in bringing them up
- I had to negotiate on the career choices for my son who had completed form four (secondary school) and was going to the University. I had to employ my negotiation skills to convince him to make wise choices that both he and I were comfortable with.
- I had an issue with my husband on payment of bills, although both of us are university professors, I thought that he was neglecting some of his duties as a husband in the past I had made frantic efforts to make him see the point. After my negotiation skills course in the Philippines I have successfully negotiated with him and he has happily taken up the responsibilities that he had in the past unfairly relegated to me and we are both happy. Thanks to this program
- Communication has improved because I now feel for others {empathy}. I am friendlier to my family members than before, I listen better and encourage others more i.e. I am more concerned about other people's feelings.
- In my personal life, my people skills have improved significantly. I strategically create time for people, which has in turn significantly improved my network. I have also developed unbelievable levels of patience and a positive outlook to life. This has had a significant impact on my appreciation of life and what it has to offer. My participation in this fellowship has made it so much easier for me to understand my own teenage children and to find joy in bringing them up
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- I have managed to submit proposals to some of the funding sources sent to us by G&D and managed to get funding e.g from ASARECA, the one Submitted to FAO is in the pipeline
- My family now understands me better and understands what I do

G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

1.7 In how I build and use professional networks with others

- I have realised the importance of networking – making contacts, talking to people by first introducing myself and having one or two lines to say about myself that will interest the other person to want to continue conversing with me.
- In G&D events and international conferences I have attended, I now don't wait to be introduced. When I meet someone whom I think it would be useful to establish contact with, I make a brief introduction of myself and then go right ahead to make known my query or exchange a contact. I had a chance to practise some of the skills learnt during the CGIAR Women's Leadership & Management Course. My supervisor invited me to a workshop where there were quite a number of distinguished scientists. During the discussions, we were divided into smaller groups. I found myself the only female and the youngest in my group. When the time came for them to ask for someone to be the rapporteur and report back to the larger group, I volunteered and put myself wholeheartedly to the task. Another workshop came soon after and this time, the organisers invited me personally to be present and to be the rapporteur and report on the workshop proceedings.
- I attended the American Phytopathological Society Meeting in Quebec City, Canada on 29th July – 2nd August 2006. One of the skills I had learnt during the first Mentoring orientation workshop was to have business cards ready to give out during the course of the conference. I am happy to say that I did make some cards and placed them near my poster so that those who visited my poster could pick one.
- Rapporteur and volunteering increased my visibility during the YPARD (Youth Platform for Agricultural Research for Development) meeting in Morocco (2005) and I am in touch with the current developments of this network to become a voice for the 'young researchers' in the CGIAR.
- I now appreciate the advantage of having networks within and beyond my career environment. I proactively establish new networks and keep them alive. Because I have a passion for Mentoring, I have also in certain cases introduced my mentees to some of my networks for strategic reasons
- My biggest achievement in my goals is the strong professional networks and associations that I have managed to join. I have been introduced to new networks by colleagues I meet during workshops and conferences. My latest network is ABNETA and ASARECA, Crop science Association, Red Cross e.t.c. The others include Global Plant Clinic, International pest and Disease Diagnostic network. I am now a champion at self introduction, a valuable Skill I learnt from my Mentor. My Mentor realised when we first met during the Orientation meeting that self introduction was my major weakness, a weakness which could have contributed to my potential not being recognised, so she took a lot of time to coach me through role play. She in fact advised me to stop my habit of laughing unnecessarily and try to put on a 'stone face' which she often referred to as mask. These days I practise what she told me, I project my voice, I choose my impact words carefully before I make a move, then I make follow ups by email. I have real stories to tell you, the impact it has had e.g I managed to get a 2 week short course on taxonomy of Leafhoppers and use of PCR to identify phytoplasma vectors in the U.K., I also managed to get sponsorship to travel to South Africa to learn their experiences with Bt. Maize. I was driven to so many places by Monsanto seed company staff at their own cost and given the opportunity to meet more scientists. I was also invited to South Africa to share my experiences working with small scale farmers, where I was treated like a VIP. I will be travelling to Mozambique to attend the Root Crops Conference and present a paper, I just put my case to my collaborators using my Mentors convincing language and got funding from the Virus Resistant Cassava for Africa project to attend the International Symposium for Root Crops in, Maputo 8-12th October 2007, the trip will be via Harare, a another golden opportunity to visit places I have never been to and create more networks. Last week I received an e mail from a collaborator at ICIPE on the Napier stunting Disease informing me he had sent my contacts to the organisers of the International Entomological Congress, which will be held in Durban, South Africa in 2008. I hope I will be able to attend and make stronger networks. Now at my Work place I am called '..... the traveller in search of knowledge'. The other day during a workshop that the Director I was officially Opening, I got great recognition and Visibility, when he said I was(institute).... Library to which other scientist can refer because he finds me in most workshops and conferences. My name now appears in the internet (try Google Search) as a result of Professional networks.
- I have been participating in professional networks i.e. Southern Africa Root crop Research Network, and the sister network in East Africa on professional grounds. I have joined the cassava breeders network sponsored by RF and I hope from the new contacts I have made I will be able to network with women in science through G&D network
- This I am now very good at. What can I say!!! Nothing I guess
- I have used the existing networks to develop very good proposals

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<p>1.8 In my organization's support of, or attitude towards the WIS program and my participation</p>	<ul style="list-style-type: none"> • My participation in this fellowship has benefited my institution because I have been sharing the ideas with them, specifically with two other female PhD students. Through my recent seminar on the G&D-Rockefeller Fellowship Program in my organization, I was able to get other people (scientists, accountants and support staff) very interested in the fellowship program and the Gender & Diversity Program as a whole. I look forward to the implementation of more G&D activities in the CIAT-Africa office. • The University as a whole and my supervisor have strongly supported my involvement in this program by granting me permission to attend to the activities of the program. There was no single time during the life-time of this program did I miss to do what I was required to do because of lack of permission. • I encourage young women scientist to register and make use of the information on the G&D web site • The Changes that have occurred to me as a result of the G&D Program have made the Institution give me more support. My participation in this fellowship has benefited my institution because I have been sharing the skills learnt with other scientists. They are also benefiting from my networks. Last year I introduced my collaborators from the Global Plant Clinic to my Director, they trained over 40 scientists and Technical Assistants on how to conduct Mobile clinics, going Public and writing extension messages. I was requested to nominate a scientist to go for training to IITA Uganda on disease diagnostic skills. The trained scientist will be KARI's resource person. The information that I receive on funding and conferences has benefited several scientists in KARI including myself, the G&D Program has therefore contributed directly and indirectly to capacity building and professional development of several scientists in my Institution and other institutions as well. • The support of my organization to the WIS program was very positive and they have been allowing me to participate now in two courses conducted by G&D. The organization is also supporting the junior mentee, they have provided a letter of support to her. • There is 100% support. I have now been given a chance to show how to Mentor in an upcoming meeting – November, 2007 • My achievements have had an impact in my Institution, as a result great recognition and appreciation of my abilities and potential. I made an effort to be visible at various forums including farmer field-days (one of my Goals). I also appreciate myself.
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2. POSITIVE CHANGES IN MY SCIENTIFIC, RESEARCH OR BUSINESS EXPERTISE

<p>2.1 In how I conduct my research or business projects</p>	<ul style="list-style-type: none"> • My style of conducting research changed gradually to Development oriented research – in order to be in line with my personal Mission of 'Striving to make a contribution to uplift the livelihoods of the less fortunate in society'. In this way, I now focus on projects that have high chances of making direct positive impact on a farmer's life. • I am the team leader of an East African research team which I was about to abandon due to problems with some members and lack of appropriate leadership skills. Now I understand and appreciate the differences within people and I've learned to tap the potential of each member. This has kept the team together. Although our funds were delayed, the funding agency has now confirmed to fund the second phase of our project. Without this program I would have lost the team and the funding. • I have used the skills I have learnt to build and use professional and research teams. What I have used is I have understood my personality style and other peoples styles and I have appreciated differences that exist between individuals and the fact that I do not work with people who totally agree with me. I have also used the fact that I need to understand peoples strong and weak points and maximise on their strong points and develop their weak points. In this way I lead by example and with these I realize that the office will operate efficiently whether I am present or absent. Empowering team member and giving them a sense of belonging and reward system is the secret of successful teams. • Through collaborative research and networks and participation in Conferences, I am more informed on new techniques of doing research • I try to beat deadlines. I am trying to re-organize myself so that I can manage time better. • I am getting more germplasm from the networks I am in
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G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

<p>2.2 In applying new knowledge, skills or methods learnt during the WIS program</p>	<ul style="list-style-type: none"> • I do apply the knowledge, skills or methods learnt during this program in my everyday life when dealing with colleagues, research teams, my students and even my family. They were and remain useful tools to improve my being • The approach used is very important, the people we work with especially the disadvantaged groups like the women need to be taken into consideration in order to achieve positive changes • Through my Mentor, I have been able to gain new skills and practical knowledge pertaining my field of specialization • Much better than other leadership training I have had. • My institution gives me 100% support. I have now been given a chance to show how to Mentor in an upcoming meeting in November. I also serve on many committees – for conference preparations, grants advisory committee for KAPP and the Commission for Higher Education – the list goes on. I was selected for the first time to moderate a session of the American Phytopathological Society. • In some cases I did the research before, but the opportunity helped me to focus and get the papers on my CV.... It opened new opportunities for me. Korea greatly increased my visibility. At the conference I used my new facilitation skills and mobilized other Africans and was elected Chairperson of this African Group of the International Society for Horticultural Science (ISHS). The first conference of this society will take place in Kenya and my university will be involved. This would not have happened without my going to the conference..... Through my endeavours in horticultural research, I believe JKUAT will achieve greater visibility and have a greater possibility to be the lead institution for horticultural research, especially under the Global Horticultural Initiative as well as hosting and organizing International Society for Horticultural Science symposia and conferences... After the conference in Korea I got involved with the leaders of the Global Horticultural Initiative and hope to work with them to benefit developing countries economically through the commercial potential of ornamentals."
<p>2.3 In how I raise money for research or business</p>	<ul style="list-style-type: none"> • Image in business is everything. I wanted to be more respected. I never thought of myself as a 'Harvard person', but the program gave me the confidence to think I can apply for their course on strategic finance for small business. I did, was accepted and returned home with a certificate I could show my bank manager. He now respects me and gave me a loan. This is even more important to me than the course itself" • As Crop Protection Coordinator in, I set up a system of revenue generation for ... (the institute)...., from fees collected from Pesticide private companies for pesticide evaluation trials by our scientists. • In raising money, it is important to have relevant networks, negotiations and writing skills to be able to write fundable research proposal. Through developing and maintaining good networks I have able to get relevant funding opportunities to which I apply for research funding • Writing proposals is the way to get research funding in my institution • I have been able to have 5 proposals developed and accepted for funding • I am getting more information on funding opportunities that it was before • I have recently been awarded funding in 50% of proposals written. I have gotten funding (scholarships) for scientists
<p>2.4 In how I understand and deal with external barriers to, and opportunities for my work (e.g. in the policy environment; the situation of farmers)</p>	<ul style="list-style-type: none"> • I now consider all situations that present themselves as 'barriers' to my career – as Challenges that trigger new opportunities in my career life. • I realise that there are barriers at all levels, even at community level. I have tried to share with women groups which I collaborate with in research, how they can live a better life at home and increase Agricultural production. I have also tried to find out their strengths and weaknesses and tried to discuss strategies that can be used to improve their situation • I am OK just on being "too fast". I need to slow down and allow others to catch up. • I am dealing with barriers more efficiently than it was before

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3. POSITIVE CHANGES IN MY PROFESSIONAL CIRCUMSTANCES AND OPPORTUNITIES

<p>3.1 In getting promotion or new career opportunities</p>	<ul style="list-style-type: none"> • I made career move to enable me get into a Leadership position and have an opportunity of facing different challenges in the private sector. • I realised my strengths and now believe I am as good or even better than others. Through more publications I have updated my CV and handed it to my Director, hopefully I will be Considered for promotion when they use our performance contracts to measure output and give merit to those who deserve. When the Director saw my CV, His comment was that if I and him appeared for an interview I stood a better chance to get the job than him. That shows that I have actually improved my CV which was one of my Goals. I hope to publish more in refereed journals and have increased chances for new career opportunities. I have applied for some International jobs and still waiting for outcomes. The G&D Office has been sending us announcements on job opportunities • I have been promoted from Program Officer to Assistant Director. This would not have happened without G&D. I stopped being aggressive and started to appreciate who people really are. You must accept your own boundaries. I now handle people better (Mentor: She was having a lot of conflict problems and not making progress. People in her institution said she changed. People always saw her as intelligent and a researcher, but she was heading for a crash.) • I have been promoted to Program leader
<p>3.2 In getting awards, scholarships, etc. recognising my progress or achievements</p>	<ul style="list-style-type: none"> • I also got the global Yara Award because of going to a conference that G&D made me aware of. I registered, asked to speak and spoke about female entrepreneurship. I was nominated for the award from FAO, with my G&D Mentor to support my application. I would not have won the award without participating in the G&D Program. The exposure has been wonderful. It has made me visible and has brought me the award. The social networks I now have will propel me on my career path. • I have received 3 awards in scientific presentations

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<p>3.3 In opportunities to lead and guide, e.g. serving on research teams, task teams, advisory committees, discussion groups, etc.</p>	<ul style="list-style-type: none"> • I am being given more opportunities to lead research teams in my institution. • Rapporteurship and volunteering increased my visibility during the YPARD (Youth Platform for Agricultural Research for Development) meeting in Morocco (2005) and I am in touch with the current developments of this network to become a voice for the 'young researchers' in the CGIAR. • Using the negotiation skills acquired during this fellowship, I was appointed KARI Crop Protection Coordinator and was recently appointed to be the KARI representative in the Board of Management of the Pesticide Control Products Board (PCPB), a board that regulates the approval of all pest control products in Kenya. • I was also recently selected (on a competitive basis) to offer expert advice on priority areas of funding by a high level funding agency in Kenya with respect to specific areas of research and development in agriculture in Kenya. • Lectures at the World Vegetable Center- Regional Centre for Africa, 25th -26th September 2006 • I was asked by The World Vegetable Centre-Regional Centre for Africa (AVRDC-RCA) in Arusha, Tanzania to give six hours of lectures on African Indigenous Vegetables, a subject very close to my heart. The experience was quite rewarding and interactive and gave me visibility and touched the lives of researchers coming from 22 African countries. New networks were formed. I partly attribute this to the communication skills learnt from this program. • Organized the 4th IndigenoVeg Meeting in Kisumu, 31st Oct to 3rd Nov 2006. IndigenoVeg is an EU funded project involving five European partners (institutions) and Seven African Partners. In Kenya,University is the participating institution with my leadership as the Principal Researcher. It was my turn to organize this meeting with 20 external and 10 internal participants. The meeting went on very well. As a whole, my participation in this fellowship has indeed benefited University. • I am motivated to work hard because I am being appreciated. I have recently received offers of positions that they have denied me in the past. I have been included in most of my institutes Committees because I have served as a role model whose out puts can be measured because I have implemented all my projects and they can be seen on ground. • I am in so many teams in my institution, i.e. editing secretariat, conference preparations, I am on the grants advisory committee for KAPP and the Commission for Higher Education, this list goes on. • Our research team has produced the best results in the on-going projects. As a team we have developed more proposals • The leadership skill obtained are helping quite a lot in leading different teams. Currently I am working part time as a Regional Representatives E/S Africa for Legumes community of Practice under the MacKnight Foundation. • I am now looked at by colleagues as an asset to (institute)....., I have got opportunities to get funded because of increased credibility as a result of training and benefits I see from networks. I am considered as a very reliable scientist, who can use networks and collaborators to have a job done. In fact the Director likes a signing me duties related to external funding. My Collaborators give me a lot of support and encourage me to write more proposals, which they have promised to fund. • I presented Africa towards requesting for funds for horticulture. I did so well, that I have been given another opportunity. • I was selected to moderate a session of the American Phytopathological Society
<p>3.4 In opportunities to collaborate with others</p>	<ul style="list-style-type: none"> • Visibility, communication and networking have earned many collaborating partners within and outside my institution nationally and internationally. Many highly placed scholars are enthusiastic about working and collaborating with me • Before the program I used to work alone and used not to seek ideas form others • A very big opportunity for collaboration. My networks have recommended me to several people and they have introduced me to their own networks. Now the sky is the limit. I have learned to search for collaborators and funding

G&D WIS PROGRAM: SELECTED FELLOWS' ACCOUNTS OF OUTCOMES AND IMPACT

<p>3.5 In how I access information that can inform my career and professional life</p>	<ul style="list-style-type: none"> • I purposefully strive to read inspirational documents from books and the internet to get information on improving my professional life. • Relevant networks with which I have registered with have been sending me information on conferences, funding and other scientific information and job opportunities and I have made attempts to make applications through those networks that include gender and diversity and African women in science and engineering • Networking has been one of the best resources, the G&D website and updates keep me well informed of opportunities • Through websites sent to us in G&D Updates and networks as well as literature search • INTERNET, by networking with colleagues and associates • I am now able to get information from scientists I have interacted with in scientific conferences
<p>4. ANY NEGATIVE CHANGES OBSERVED OR EXPERIENCED AS A RESULT OF THE WIS PROGRAM</p>	
<p>4.1 Negative changes in my social skills or attitudes (all comments received reflected here)</p>	<ul style="list-style-type: none"> • None • Some of my male colleagues believe that the program is a women movement, which is not needed. They think it is a feminist movement • My bosses can be hostile at times
<p>4.2 Negative changes in my scientific, research or business expertise (all comments received reflected here)</p>	<ul style="list-style-type: none"> • None • Little time available for total commitment, sometimes you find yourself too busy to meet with the Mentor or vice versa. • Inadequate funding has been a big set-back in my research work
<p>4.3 Negative changes in my professional circumstances or opportunities (all comments received reflected here)</p>	<ul style="list-style-type: none"> • None • None that I can think of. Except most of my colleagues believe the fellowship is for a PhD and they do not inform me of certain opportunities which may be good for me.



